File No. OG 004-98

L. Kamerman)	Friday, the 30th day
Mining and Lands Commissioner)	of April, 1999.

THE OIL, GAS AND SALT RESOURCES ACT

IN THE MATTER OF

An appeal pursuant to section 7.0.2 of the **Oil, Gas and Salt Resources Act** from the decision of the Inspector, dated the 18th day of December, 1997, regarding Well Permit 8470 for the well Metalore #89, North Walsingham, 7-22-VII.

BETWEEN:

METALORE RESOURCES LIMITED

Appellant

- and -

MINISTER OF NATURAL RESOURCES

Respondent

ORDER

WHEREAS the initial appeal from the decision of the Inspector in this matter was heard by Mr. Pentti A. Palonen, Manager, Petroleum Resources Section, Ministry of Natural Resources on the 3rd day of February, 1998, with a Notice of Decision issued by Mr. Palonen on the 17th day of February, 1998;

AND WHEREAS, Linda Kamerman, Mining and Lands Commissioner for the Province of Ontario was designated as the Hearing Officer to hear the appeal of Mr. Palonen's Decision on the 25th day of February, 1998, pursuant to section 7.0.2 (3) of the **Oil, Gas and Salt Resources Act**;

AND WHEREAS the appeal of Metalore Resources Limited was filed with this tribunal on the 16th day of March, 1998;

AND WHEREAS this appeal was heard in the courtroom of this tribunal, 24th Floor, 700 Bay Street in Toronto, Ontario on the 4th and the 22nd days of December, 1998, respectively;

UPON hearing from both parties and reviewing the documentation filed;

1. I ORDER that the appeal of Metalore Resources Limited, from the decision of the Inspector, dated the 18th day of December, 1997, regarding Well Permit 8470 for the Well Metalore #89, North Walsingham, 7-22-VII, be and is hereby granted, on the condition that the drilling of Well Metalore #89 be drilled continuously to completion.

Reasons for this Order are attached.

DATED this 30th day of April, 1999.

Original signed by L. Kamerman

Linda Kamerman MINING AND LANDS COMMISSIONER AND HEARING OFFICER

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BETWEEN:

METALORE RESOURCES LIMITED

Appellant

- and -

MINISTER OF NATURAL RESOURCES

Respondent

REASONS

This matter was heard on December 15 and 22, 1998, in the Courtroom of the Office of the Mining and Lands Commissioner, 24th Floor, 700 Bay Street, Toronto, Ontario. Metalore Resources Limited ("Metalore") was represented by its lawyer, Mr. Jeremy Devereaux, with Mr. George Chilian, its president, also in attendance. The Minister of Natural Resources ("MNR") was represented by its lawyer, Mr. Brian Wilkie, with Mr. Rudy Rybansky, of the Non Renewable Resources Section also in attendance.

Background and Facts Not in Dispute

Metalore was issued a drilling permit by MNR on January 17, 1996, to drill its Metalore #879 North Walsingham Well. The permit (Ex. 7) states on its face that it expires on December 17, 1997. The permit would expire at midnight on that date if Metalore did not "spud" the well before that time.

In its Application Metalore sets out, among other things, that the drilling contractor will be Elgin Mitchell & Sons. Its "proposed casing and cementing program" sets out an estimated depth of 88 metres of 8 5/8 " casing and 388 metres of 4 1/2" casing. The projected starting date was December, 1996. A drilling program (Ex. 6) also dated November 15, 1996, sets out, regarding item 2, "Hole Sizes" that a 12 1/4 Rotary bit will be used through the alluvial into first rock (81 metres); 10 5/8 rotary below expected deepest fresh water (88 metres); 7 7/8 rotary below fresh water into Clinton (388 metres); and 4 inch cable tool hole into Cabot Head Shale (399 metres).

For reasons which will be discussed more fully below, the clearing of the well site did not take place until November, 1997. Metalore made a business decision regarding potential expense and did not use Elgin Mitchell & Sons as its drilling contractor, electing to go with 1071694 Ontario Ltd., owned by Mr. Dave Mitchell. The rotary drill rig belonging to Mr. Dave Mitchell was awaiting a part from the United States and when it arrived, certain machining was necessary to make the rotary drill rig operable, which could not be completed by the December 17, 1997 midnight deadline. On December 17, 1997, Mr. Dave Mitchell used a cable tool rig to drill a hole some 22 to 24 feet into the sandy surface of the land and drove in a 13 1/2 inch casing.

There was no denial by Metalore that it did not use the drilling contractor specified in its drilling program, that it did not use the type of drill rig specified at the depth it was working at, and that the size of casing which was driven into the ground was not as specified in its drilling program. Nonetheless, Metalore takes the position that it satisfied the conditions of its licence to drill, as set out in section 3 of Ontario Regulation 245/97, that by breaking the surface with a drill, it succeeded in spudding the well. This being the case, it should be regarded as having a valid licence to continue drilling.

MNR took the position that, breaking the surface to a depth of 22 or so feet, with a cable tool rig and driving a length of 13 1/2 inch pipe in, neither of which is in accordance with the drilling plan, does not constitute the spudding of the well. Having taken this position, Metalore was notified in writing the next day by Mr. Brian Steele, Inspector of the Non Renewable Resources Section of MNR that its licence expired at midnight, December 17, 1997.

Issues

1. As a question of fact, did Metalore drill or pound a hole of approximately 22 feet in depth with a cable tool rig into which a 13 1/2 inch pipe was driven or did it drive an unknown length of pipe into the ground without use of any type of drilling equipment?

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- 2. If the finding to #1 above is that Metalore used a cable tool rig to drill a hole 22 feet into the ground, into which the said casing was driven, does this constitute the spudding of a well?
- 3. While the issues for determination do not directly involve whether Metalore was in compliance with the **Act**, was it in compliance? If not in compliance, does such a finding have a material effect on the determination?
- 4. What drilling depth is necessary to constitute spudding? What other elements are necessary to constitute spudding of a well as set out in subsection 3(2) of O.Reg. 245/97?

Legislative Background

The Application for a Permit to Bore, Drill or Deepen a Well, dated November 15, 1996 (Ex. 4) states at the top that it is *Form 5*, pursuant to the Petroleum Resources Act, 1971. The Metalore Permit, bearing number 8470 (Ex. 7) appears on *Form (Formulaire) 106*, made pursuant to the **Petroleum Resources Act, R.S.O.** 1980.

The legislation under which this matter arises is the **Oil, Gas and Salt Resources Act**, R.S.O. 1990, c. P. 12, as amended by S.O. 1994, c. 27, s. 131 and S.O. 1996, c. 30, ss. 56 - 70 (the "**Act**"). Under the **Act**, a person, usually an operator, is prohibited from drilling a well, among other activities, unless in accordance with a **license** [ss. 10(1)]. Section 3 of Ontario Regulation 245/97 ("O.Reg/ 245/97" or "the regulation") provides that a license application shall be in accordance with Part O of the Provincial Standards (Ex. 21). It also provides that the license expires on the first anniversary date of its issue if the well was not spudded.

The transitional note in the consolidated version of the Act at section 10 states in part:

Note: This section does not apply until June 27, 1998 to the operator of an unplugged well that was drilled before June 27, 1997 without a permit issued under the *Petroleum Resources Act* or section 154 of the *Mining Act*. Such an operator who does not obtain a license relating to the well under the *Oil, Gas and Salt Resources Act on or before June 27, 1998 is deemed to be in contravention of this section.* A valid permit to bore, drill or deepen a well granted under the *Petroleum Resources Act* before June 27, 1997 is deemed to be a license relating to the well granted under the *Oil, Gas and Salt Resources Act*.

Evidence

Evidence on behalf of the appellant, Metalore, was given by **Mr. George Chilian**, president of Metalore, who has been in the oil and gas business since 1964, by **Mr. David Glen Mitchell**, owner and principal of 1071694 Ontario Ltd., the drilling contractor which carried out

the work at issue and by **Mr**. **Michael John Hunter**, chief consultant with Resource Link and former Deputy Chief Inspector with the Petroleum Resources Section of MNR.

Evidence on behalf of the respondent, MNR, was given by **Mr. Brian Douglas Steele**, who for the last 4 1/2 years has been an oil, gas and petroleum inspector, and by **Mr. Jug Manocha**, being the Professional Engineer who wrote the Operating Standards applicable to implementation of the **Act**, both with the Non Renewable Resources Section, formerly the Petroleum Resources Section, of MNR.

Events Leading Up to December 17, 1996

Mr. Chilian stated that Metalore had applied for two drilling permits in 1996, but experienced pressures which would not allow it to proceed with the drilling until well into 1997. Metalore having made no efforts to spud one of the wells and as a result, that earlier permit was allowed to expire. The decision to drill the subject well was made later in 1997, with the wheels being put into motion some time in October of that year. Mr. Chilian stated that he first contacted the contractor listed in the permit application, Elgin Mitchell, concerning the drilling of the well. Mr. Elgin Mitchell was sent a contract, which was discussed, but wanted revisions to it. Mr. Chilian characterized Mr. Elgin Mitchell's demeanour as dragging his feet well into November, giving the impression that he was attempting to delay Metalore for more money.

Mr. Chilian stated that he then approached Mr. Dave Mitchell to see whether he would be willing to drill the well for the price which Metalore was offering. A contract was entered into with Mr. Dave Mitchell's company, 1071694 Ontario Ltd., on December 15, 1997 (Ex. 1, Tab 11). Discussions had commenced prior to the signing and Mr. Dave Mitchell was aware of the expiry date of the licence. Two weeks prior to signing, Mr. Dave Mitchell had indicated to Mr. Chilian that he was confident that he could spud the well in time. Mr. Mitchell confirmed that discussions had taken place several weeks before the contract was signed.

Prior to developments with the drilling, Allan's Excavating & Trucking prepared a bush road and dug a cuttings hole or pit. The invoice from Allan's is found at Exhibit 1, Tab 10, setting out this work. Mr. Chilian described the flagged areas which Allan's cleared, being along the lot line down from the road allowance several hundred feet, a right hand turn and another several hundred feet of clearing, a clearing of the well site area and while he personally was in attendance, the digging of a cuttings pit. Mr. Mitchell explained that the cuttings pit is to accommodate all of the pieces which come up out of the hole being dug for the well. Mr. Mitchell, acting on Mr. Chilian's instructions, visited the site to ensure its preparation, but at the time of his visit, not all of the bulldozing had been done.

Mr. Mitchell indicated that, prior to the difficulties encountered with the rotary tool rig, Mr. Chilian had been quite clear as to how the drilling was to be accomplished, namely that Mr. Mitchell was to work with a rotary drill rig until he hit the Clinton formation, but that he should not penetrate that formation with the rotary drill. Mr. Mitchell indicated that this procedure is considered common knowledge and that switching drills is also common.

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At the time of their discussions, Mr. Mitchell believed the rotary drill rig owned by his company was ready to go, but he then encountered problems. According to Mr. Chilian, the parts were ordered from Oklahoma, and Mr. Mitchell believed that they would arrive in time. Before Wednesday the 17th of December, possibly the prior Friday or Monday, Mr. Mitchell came to believe that the parts would not arrive in time and when they did, they required tooling and could not be fixed to have the rotary tool rig up and running in time.

Mr. Mitchell stated that he called Mr. Chilian on Monday, the 15th, advising him of the problem with the rotary drill. It was Mr. Mitchell's proposal to go in on the 17th with a cable tool rig and commence drilling the well. Mr. Chilian was agreeable to this, as he was willing to do anything, according to Mr. Mitchell, to save the permit. According to Mr. Chilian's evidence, it was indeed Mr. Mitchell who proposed to do this, although not certain of the exact date, but perhaps three or four days before the 17th. Mr. Chilian stated that there was no alternative, but to go ahead and drill in the manner proposed by Mr. Mitchell.

Mr. Chilian described the difference between a rotary tool rig and a cable tool rig and a schematic of a cable tool rig, showing "drilling and driving operation" (Ex. 20) that was entered into evidence by Mr. Wilkie. The rotary works on the same principle as a diamond drill, breaking pieces as it goes down in a rotary fashion. The cable tool rig operates like a jackhammer. It is suspended from a cable, with a heavy stem, while the cable moves up and down. Either machine can drill equally deep holes, being limited only by the size of the machinery.

Activity on December 17, 1997

Mr. Mitchell stated that he was joined by Mr. Bob Elfner in the activities on the 17th. He had explained the situation to Mr. Elfner, who had worked with him in the past, asking whether he would be willing to help. Mr. Elfner owned the cable tool rig which they used, although Mr. Mitchell's company subsequently acquired its own. They commenced around 7:00 or 7:15 in the morning, with one driving the drilling rig mounted to the truck and the other driving the service truck. They arrived between 8:00 and 8:15 a.m., encountering some difficulty in getting back to where the survey stake was located. The process of setting up involved putting a

box under the hydraulic outriggers, setting the outriggers, tipping the tower up, extending the tower and the getting everything ready to drill. The entire set up process took less than an hour.

They then started by putting the rig in gear. The rig carries the stem, which is on the tower attached to the rig. With some outfits this tooling is carried separately. The cable goes up from the stinger, which is inside the prosser socket. Because the stem is carried by the rig, as opposed to carrying the tooling separately, it is able to work very quickly. The bit is found at the bottom of the stem. To operate, the stem is in the tool guide which is made out of steel. It opens up and swings around and holds the stem in place. The stem can move around inside with a couple of inches of clearance.

The stem bit weighs between 1,200 and 1,400 pounds, and pounds up and down. Its stroke varies from between 20 to 36 inches. The stem moves up and down at a rate of between 30 and 60 strokes a minute. The procedure involves starting more slowly as the stem and bit can "walk around a bit" until the hole is started. $\dots 6$

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Once set up, Messrs. Mitchell and Elfner commenced drilling. Both are qualified as operators and shared this portion of the work. Mr. Mitchell explained that he has the "rig sickness", that he has to be involved in the drilling itself, which apparently was not a problem for Mr. Elfner. Once the bit was buried, they dug down to a depth of 22 to 24 feet, being the length of the stem. Once the stem and bit are in the ground, they allowed it to flop around to make the hole large enough for the casing, and then they pulled them out. They were able to see into the hole just made. Mr. Mitchell said that they then hooked onto the 13 inch casing, which was 22 feet in length and weighed between 40 and 60 pounds per foot. They hooked it with a chain onto the block line of the rig, and picked it up by coupling. They then put it in the hole and began to work the pipe up and down.

At first, the pipe was hooked on the block line like a winch. It was worked in far enough so that the bit, stem and socket could fit. They then put the stem inside, with everything attached, then went into "drilling mode", getting the pipe to "follow". This process was called "drill and drive" by Mr. Chilian. Mr. Mitchell stated that all he wanted to do was to get the pipe to ground level, so he could get to it with his rotary drill when it was fixed and he could move it in.

The process of driving in the pipe took another hour or so. Once the pipe stopped going in, it stood above the ground over six to seven feet, well over Mr. Mitchell's head. At this point, he put a heavy piece of hardwood on top and pounded it the final distance into the ground. Mr. Mitchell stated that there was earth inside the pipe starting at a depth of approximately four to five feet, which he called bung. He stated that they had felt it did not need to be cleared out, but in any event, as a safety precaution it should be left in, should children or animals fall in. Later that day, Mr. Mitchell returned to the site and put the spool over the pipe.

Mr. Mitchell was familiar with the word "spud" and in his opinion, the work done by him and Mr. Elfner on the 17th of December qualified as spudding. Mr. Chilian was not at the site during the activity, but Messrs. Mitchell and Elfner met him on the way out, relaying all that had been done. According to Mr. Chilian, when they met, he saw the cable tool rig coming out, recognized Mr. Bob Elfner, but spoke only with Mr. Mitchell, who did not say that he had drilled a hole, but only that he had put the pipe in. Mr. Chilian then proceeded to the site, which looks much the same as it did when he visited with Mr. Hunter in December, 1998 and took pictures. He described the top of the 13 inch pipe protruding from the ground, now with the spool in place for security purposes.

Asked about the usefulness of the 13 inch casing, Mr. Mitchell stated where there is blow sand which could readily slough into the hole, he personally would have used the pipe until the drilling job was done.

Mr. Mitchell stated that he planned on drilling down to bedrock and beyond, once he had his rotary drill rig up and running, within a week or ten days.

Mr. Mitchell was paid \$10,000 by Metalore for his work (Exhibit 17 is a cheque from Metalore made out to 1071694 Ontario Ltd. dated December 17, 1997, in the amount of \$10,700, which itemizes "spudding #89").7

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Mr. Mitchell stated that he conveyed the circumstances of what took place to Mr. Steele over the phone after December 17th. Asked whether he might have told Mr. Steele that he and Mr. Elphner had loosened the soil and pushed the casing down, the response was that he might have, although he didn't know whether he used the word "push", that with a cable tool, one would pound, not push. Some confusion over the terminology ensued.

Mr. Mitchell indicated that he might have seen the Metalore drilling program, but was not certain. He has been working with Mr. Chilian for 25 years and stated that they read each other's minds on what is required. However, he has drilled around 75% of Mr. Chilian's wells. As for the drilling program itself, Mr. Mitchell characterized it as a road map or guide, but indicated that conditions may vary. For example, if it says 81 metres, it could mean 79 or 88 metres, depending on conditions. As to the casings, Mr. Mitchell stated that one must pretty much follow the application or do better. In his opinion, the extra casing may be there for safety purposes. He agreed that MNR would look to the casing at completion and the casing better be what was indicated. Some comments were made to the effect of being inundated with paperwork, but Mr. Mitchell maintained that there had to be flexibility in the system to accommodate drilling conditions.

Under questioning from Mr. Wilkie, it was suggested that the approval was based upon the type of casing proposed and that it was fundamental to the application. Mr. Mitchell stated that it was not possible to factor all the possible casings which might have a role in the drilling program. Mr. Mitchell stated emphatically that it was his idea to use the 13 1/2 inch casing in an effort to keep the licence alive. However, when Mr. Chilian was to do his completion record, the 8 inch casing would have been in place to the length described.

Mr. Mitchell offered information concerning his own practice. When he commences drilling with his rotary drill, he has a special piece of 14 inch pipe which goes into the ground first, which he calls a spout. When the well is completed, the spout comes out. As to whether one could just drive in a pipe such as was used, Mr. Mitchell said that some might try to drive without drilling, but he couldn't without using the stem (ie. cable tool rig stem) ahead of the pipe.

As to the matter of daily drilling records, Mr. Mitchell stated that he has a little doodling book in which he writes down his activities. He did not post the drilling permit, which was probably in a folder in his truck at the time. When asked about the requirement to have it posted at all times during drilling operations, Mr. Mitchell stated that he doesn't have a doghouse.

Had he been able to get his rig in on December 17th, Mr. Mitchell states that he would have continued drilling for a week to ten days until he ran out of drill rods. As to that portion of the well using 8 1/12 inch casing, it might have taken a day to complete [88 metres].

Mr. Steele stated that he noted that the licence for the Metalore #89 Well was due to expire at midnight on December 17th, having a spud notice attached to it, so he decided to inspect it along with several other sites on that day. He described his inspection tours as taking place approximately once per week, visiting three to five sites. With MNR receiving 100 to 150 gas exploration applications per year, he does not have time to visit all sites. However, it is his practice to review files to see whether a site visit is warranted.

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What concerned him regarding the Metalore #89 well was the letter dated December 15, 1997 from Mr. Chilian, addressed to Mr. Ernie Habib, Operations Supervisor of the Petroleum Resources Section, MNR, (Ex. 1, Tab 12) where he stated that the well would be spudded "sometime this week". As the time of expiry of the licence was to be midnight on the 17th, the wording of the letter caused Mr. Steele some concern. The letter was the equivalent of raising a red flag because of the date of its writing, which allowed only two days for compliance, although the letter seemed to imply the possibility of it being spudded after the 17th, by its choice of wording. Mr. Steele was very concerned about this. Mr. Steele stated that MNR had issues with non-compliance on other matters with Mr. Chilian.

The site visit was Mr. Steele's last inspection of the day, with his arriving at around 4:30 p.m., to ensure that there was sufficient light to take pictures. He immediately noticed a 13 1/2 inch steel casing protruding from the ground some eight or ten inches. Also at the site was what Mr. Steele characterized as a partially prepared sludge pit which, if it were to be used, did not conform with the standards. It lacked a liner, was not of the specified size and lacked the required fence enclosure.

Mr. Steele explained that the sludge pit is used to store materials that are extracted during the drilling process. They are stored on top of the ground, and require a barrier in place to prevent penetration of chemicals used in drilling. Particularly with loosely textured sandy soil, contaminants from the extracted material would seep through the land, as it was not contained. The material which is to go into such a sludge pit is comprised of the cuttings, water mixed with sand and lubricants for drilling.

Mr. Steele stated that he determined by using a flashlight that the depth in the casing was six feet. The hole had a firm bottom, which he was able to determine by scratching it with a branch. There was no drilling equipment located at the site. The site itself had been prepared and excavated so that machinery could come in, but no such machinery was there. As well, there was no permit displayed at the site, which is a condition of the permit to drill. Given the circumstances of what he found at the site, Mr. Steele came to the conclusion that it had not been spudded.

Mr. Steele described what normally would be apparent at a spudded well, comparing it with what he found. He stated that there is drilling equipment located at the sight, whether it be a rotary or cable drill rig. There would be a fully prepared sludge pit. In examining this site, he didn't know what had actually been done, didn't know the depth of the casing in place, or even whether it was intended to be used in the drilling process. The fact that there was no permit at the site, which is a legal requirement, did not reflect what Mr. Steele believed would be indicative of a spudded well.

Mr. Steele explained that the drilling program submitted with the application is used by MNR in its process to determine whether the permit or licence will be granted. The change in the well casing from 8 5/8 inches to 13 1/2 inches was material, as would be the change in drilling contractors, of which Mr. Steele was not aware at the time of inspection, but became aware of later. O.Reg 245/97 requires that MNR be notified of any changes to the licence application or

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accompanying information, and the operator is prohibited from continuing with the drilling until such time as MNR approves the changes. Mr. Steele referred to what degree of flexibility could be associated with the licence and attached conditions, stating that there is leeway to deal with conditions met in the field, but overall, such adjustments must be minor. An example of this would be that bedrock was encountered at a different depth, by a few metres, than what had been anticipated. However, changes such as using old instead of new casings require both the notifica-tion and approval of MNR.

Mr. Chilian stated that it was his intent to move back onto the well as quickly as possible after the 17th. Mr. Mitchell told him that they would begin drilling by the next week, which Mr. Chilian related to Mr. Steele in a letter, stating that drilling would resume early in the New Year.

Events on December 18th

On the morning of December 18th, Mr. Steele stated that he wrote to Mr. Chilian (letter found at Exhibit 1, Tab 14), describing what he found at the site around 5:00 p.m. the previous evening. In part, the letter states:

A new roadway had been built from the Township right of way into the wood lot to the well site. Also the immediate area around the well site had been cleared of trees and other debris.

Found at the well site was a piece of steele casing approximate six feet in length and having an inside diameter of 13 1/2 inches. The casing was found to be in a vertical position and protruded approximately six inches above ground level. At the well site there was no evidence of a drilling rig or other associated equipment.

Be advised that the installation and measurements of the steel casing as referenced above does not constitute spudding of a well. Also the permit known as #8470 issued December 17, 1996 for this well has therefore officially expired as of 12:01 a.m. December 18, 1997.

The letter concluded with reference to making a new application for a well licence. Mr. Steele explained that the reasons he reached the conclusions he did were that he had no idea what was in the ground, found no drill equipment at the site and that there was no properly prepared sludge pit.

Mr. Chilian stated that he had not been contacted by Mr. Steele prior to the inspection. Angry at the receipt of the letter, Mr. Chilian called Mr. Steele. Mr. Chilian explained that in his opinion, the well had been spudded, which meant to break the surface and start drilling, that they had been waiting for parts to come in for the rotary tool rig, and had not had sufficient time to machine and install them and continue the drilling of the well. Mr. Chilian could not recall at what point the 13 1/2 inch casing was discussed, but at the suggestion that it did not

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form part of the drilling program, Mr. Chilian agreed that it was not part of the application, but is common practice when you have a tough surface to have an extra conduit on the ground at the top. At this site there is sand, which is very hard to keep out. The casing is temporary, not germane to the drilling program.

Mr. Steele stated that, in the course of the telephone call, Mr. Chilian explained that there were 22 feet of casing in the ground and that he was planning to drill within a couple of days or in the new year at the latest. Mr. Steele undertook to discuss the matter further with others in the office. He stated that his office had had previous concerns (not with Metalore) where a pipe was sticking out of the ground with no other evidence of drilling. Mr. Steele confirmed with Mr. Mitchell that they had "loosened the ground and pushed the casing down " 22 feet, being finished by noon.

In the meantime, Mr. Chilian prepared the letter that had been requested by Mr. Steele (Ex. 1, Tab 14), which set out the name of the actual contractor used; the fact that the drilling, to have commenced in November, was delayed as a result of having to wait for parts; that owing to a desire to save the permit, a cable tool rig was brought in and used to drive a pipe 22 feet; that the drilling had been temporarily suspended to be recommenced in early January with the rotary rig; that no water was encountered in driving the first joint, and requesting an amendment to the application to accommodate the temporary 22 foot length of 13 inch pipe.

Mr. Steele stated that he called Mr. Chilian back, advising him that even if the casing were 22 feet in the ground, it was not considered to have been spudded, as he was in violation of the permit, through the use of a different contractor and casing. In this regard, a letter was written (Ex. 1, Tab 15) outlining these facts.

Mr. Steele referred to a letter written by Mr. Chilian to Mr. Ray Pichette (Ex. 1, Tab 16) dated December 19th, which referred to an attached clipping. The essence of the letter was that the well could be considered spudded if drilling were to be allowed to continue. The letter indicated that Mr. Chilian had come away from the initial conversation with the impression that, when fully informed, Mr. Steele would reverse his original decision. However, the notification of the revocation of the permit came to Mr. Chilian in the intervening time frame before he could get written notice of a suspension as sent to Mr. Steele (Ex. 1, Tab 14).

Mr. Steele explained the voluntary nature of compliance in the oil and gas drilling program. He stated that he had made no attempts prior to the expiry of the licence to contact Mr.

Chilian, as he believed nothing could be accomplished. It was reiterated in cross-examination that contacting operators is not part of MNR's practice, as they do not have the time to do it in each case. He also referred to the difficulty in reaching operators during business hours when they could be out in the field.

Mr. Steele stated that he did not believe that there were major consequences to his letter stating that the licence had expired. Metalore could re-apply, which operators do all of the time, even without consulting with the Non Renewable Resources Section. The cost of the application is \$100 plus tax. As the drilling program was already in place, Mr. Steele believed it would only require the one page application, without supporting documentation. Mr. Chilian's evidence was that considerable paperwork was involved. 11

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Mr. Steele stated that he had expected Mr. Chilian to re-apply. Instead, he had not and matters had escalated. Mr. Steele explained that there are operators who do and some who do not have issues of compliance. With Mr. Chilian, there are a number of different issues of non-compliance. Mr. Steele regarded Mr. Chilian's attitude and actions in this matter as intimidation, mentioning as well that Metalore had initiated a three million dollar law suit against him personally, MNR and other employees, being just one indiction of this intimidation. He stated that, as a conservation officer, conflicts are part of his job, but he had never been sued before. Mr. Steele expressed grave concerns regarding being able to carry out the functions of his job, particularly related to compliance.

In a letter to Mr. Ray Pichette dated December 19, 1998 (Ex. 1, Tab 18), Mr. Chilian set out Metalore's position that the well had been spudded prior to the deadline and he requested a quick hearing. Ironically, the letter stated that the rotary tool rig was now ready to go, a mere two days after December 17th.

Mr. Steele summarized the contraventions to the operating standards. The sludge pit was not lined, fenced and not completely dug. The permit itself was not posted, notwithstanding that it states that it must be posted at all times during the drilling process, whether on a trailer or a tree. Had Mr. Steele come along when drilling was ongoing, he stated that drilling would have had to have been stopped until such time as the sludge pit were properly constructed, the permit

was posted and the proper casing was used according to the drilling plan. Since there was no drilling activity at the time, there was no evidence to show what had taken place.

Mr. Steele was asked if the evidence showed that if the cable tool rig had "drilling a hole prior to putting in the pipe", would it alter his conclusion. He reiterated that he did not know whether the hole was there as a result of drilling, but that there would be non-compliance. It is not the fact that a cable tool rig was used; rather it was due to circumstances surrounding non-compliance with the drilling program and the legislation that the well could not be regarded as spudded.

Mr. Steele agreed, in cross-examination, that "spud in" or "spud" meant to start drilling a well, or to penetrate the surface of the soil with the drill in place (See Ex. 1, Tabs 3 and 4). Mr. Steele discussed procedures in his office leading up to his inspection, stating that he would have expected the operator in these circumstances to call, warning that they could not comply in time, seeking a new permit in time to allow for no hiatus. Regarding his time of inspection, being 4:30 p.m., Mr. Steele stated that it is very unusual to go out to see whether a well has been spudded on the last day of the permit and that this is the only time he has done it. As per the photographs, tire tracks are visible in the snow, but Mr. Steele stated that snow had been on the ground since the fall and he had no way of knowing whether there was someone at the site that day. The visible tracks were large and he agreed that it crossed his mind that they could have been from a rig. Mr. Steele acknowledged that there was no breach with the slush pit as there was not yet any slush.

Mr. Steele stated that he was able to determine that a piece of equipment had been on the site for 3 3/4 to 4 hours; a hole had been drilled to an unknown depth that there were no drilling logs to allow him to see how long it took or what had been taken from the ground.

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Concerning the steps taken with Mr. Chilian, Mr. Steele was asked whether it might have been better to have sought information first. Mr. Steele maintained that the position taken was based on non-conformity with the drilling program. Mr. Devereaux referred to the two definitions of "spud", "spud in" and "spud date" found at Exhibit 1, Tabs 4, 5 and 7. Tab 4, being in the glossary of the Operating Standards defines "spud" as "to start drilling a well". Tab 5, an excerpt from **Words and Phrases Judicially Defined in Canadian Courts and Tribunals** (Carswell: 1993), Vol. 7, p. 1057, taken from **Risvold et al. v. Scott et al.**, [1938] 2 D.L.R. 238 at 243 (Alta T.D), sets out that "[spud in] is a well known term in oil fields and means penetrating the surface of the soil with the drill in place." Tab 7, being R.G. Langenkamp, **The Illustrated Petroleum Reference Dictionary** (Pennwell: Tulsa, Oklahoma, 4th ed. 1994), page 428, defines spud as, "To start the actual drilling of a well" and spud date as, "The date specified in a farmout or other exploration contract for the spudding in of a well - the actual first penetration of the Earth by the drill bit."

Mr. Devereaux requested that the issue of compliance be separated from the issue of spudding. Mr. Steele reviewed what he had seen. Namely, the incomplete sludge pit, the hole drilled to an unknown depth with soil found at six feet within a casing not conforming to the drilling program and no rig at the site. Mr. Steele stated that spudding to him meant that there is equipment present and activity occurring. The definition "start drilling" meant that there should be activity. His inspection revealed none.

The matter of the temporary 13 1/2 inch drill casing was discussed. Mr. Steele stated that whether or not it was to be removed, it should be included in the drilling plan. He admitted that he has never drilled a gas well and is not familiar with the use of surface casing. Mr. Steele emphatically maintained that he was not in a position to make assumptions, but had to proceed based upon what was contained in the drilling program. Finding the wrong casing, which Mr. Steele admitted surprise to see sitting by itself, coupled with the absence of a drilling rig and a prominently displayed licence led to the conclusion that the well was not spudded.

Mr. Steele admitted that not all applications mention the drilling contractor, but where a change takes place, it must happen with notification as per the legal requirements. Similarly, if MNR had been notified of the change from a rotary to a cable tool rig, it would not have been a big issue, as it is the notification which ensures compliance.

Mr. Steele maintained his opinion during cross-examination that the well had not been spudded. While he might look for additional information in some circumstances, Mr. Devereaux questioned why Mr. Steele did not attempt to fill any gaps in his knowledge or ask questions of those in a position to know what had taken place. Through subsequent telephone conversations with Mr. Chilian regarding the depth of the casing, Mr. Steele indicated that the response by Mr. Chilian, who was quite upset, was typical from any operator who believes his well has been spudded and is informed that his licence has lapsed. Mr. Steele indicated that his decision was his own, first of all and that he later conferred with others in his office, who confirmed his view.

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Mr. Steele stated that his phone call with Mr. Mitchell did not persuade him that he was wrong. Mr. Mitchell stated that they had loosened the soil and pushed the casing down. Mr. Steele was made aware that a rig was used to do the work and had been removed at noon. Even knowing that a rig was used, Mr. Steele maintained his decision that the well had not been spudded. The main reason for this conclusion was that drilling was not in progress. Nothing was apparent at the well site to suggest that the well had been started, that they intended to go on with the drilling and that it would be completed.

Mr. Devereaux suggested that Mr. Steele knew or could have known that there had been a drilling rig present, that drilling had taken place and then a pause in the drilling occurred. Mr. Steele responded that, due to the past relationships with Metalore prior to this occurrence, he had no assurances that it would honour its commitment. Mr. Steele reiterated that Mr. Mitchell, the contractor, had not said that they drilled a hole, but rather they pushed the casing down. It was not until he contacted Mr. Elfner that Mr. Steele was aware that they had dug a hole ten feet in length and pushed the casing in. Again, Mr. Devereaux asked whether that did not constitute spudding, according to the definition found in the Operating Standards. Mr. Steele did not agree.

Mr. Devereaux pointed out that the Operating Standards say to start the drilling of a well and according to the definition in **Risvold v. Scott** to penetrate the surface of the hole with the drill in place. If those two definitions are accurate, the first part of a hole drilled with a drilling rig, such as was done here, must indicate that the well was spudded.

Mr. Steele maintained that he did not agree. It is no good to just stop drilling at ten feet, which in his view does not constitute spudding. It is not so much that there are the extra requirements but that once you start drilling a hole, you have the equipment present to continue drilling. Mr. Steele stated, that without a rig at the site, he had no idea of when they would come back and recommence drilling. Therefore, he operated on the assumption that they were not going to come back. Despite repeated questioning and reframing of the facts, Mr. Steele did not agree that the well had been spudded. Mr. Steele stated that Metalore did not need a permit or licence to put a 22 foot piece of casing in the ground, even if it were on the location of the proposed well. In spite of the further information from his various phone calls, Mr. Steele did not waver from this position. When told that Mr. Hunter was of the opinion that spudding occurred, Mr. Steele stated that he was aware of Mr. Hunter's experience, although not privy to his expertise.

As to matters concerning non-compliance and other concerns about Metalore, Mr. Steele agreed that Metalore has, to the best of his knowledge never been convicted of an offence in relation to a gas well. Mr. Steele remembered a public meeting which took place on December 2, 1997, at which staff of the Petroleum Resources Section offered information and which Mr. Chilian attended. He remembered that Mr. Chilian addressed comments to the panel, was not happy with the response and left early. He could not recall someone from the MNR office making a comment to the effect, "We'll get him".

Mr. Devereaux challenged Mr. Steele on his comments in evidence-in-chief that he felt intimidated by Metalore, pointing to the last paragraph in his letter to Mr. Chilian of December 18, 1997 (Ex. 1, Tab 15), where, after setting out that the permit has expired, it states:

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Be advised that if you elect to commence drilling of the above well without a valid permit (because permit #8407 has expired) you will be in contravention to the Oil, Gas and Salt Resources Act. Furthermore our office will have no alternative but to proceed by taking legal action against Metalore Resources Limited for <u>drilling without a valid Well Licence.</u>

Mr. Devereaux asked whether MNR has attempted to lay charges against Metalore in the past, with which it did not proceed, and suggested that the letter implied a threat. Mr. Steele indicated that that was not the intent.

In re-direct examination, Mr. Steele stated that section 5 of O.Reg 245/97 and section 10 of the **Act** make it a requirement that drilling take place in accordance with a licence and that no changes can be made to any "information supplied on the ... application or the accompanying well location plan and shall not drill or continue drilling unless [MNR] approves the changes."

Expert Opinions

Mr. Hunter, who has been in the private sector since 1996, prior to which he worked for MNR inspecting gas wells from 1976 to 1986 and as Deputy Chief Inspector from 1986 to 1996. Mr. Hunter was recognized by the tribunal as qualifying as an expert on drilling and inspections.

Mr. Hunter reviewed the definitions for "spud", "spud in" and "spud date" at Tabs 4, 5 and 7 of Exhibit 1 and agreed that they were reasonable definitions of the word and are reflective of how they are understood in the industry, much the same way as medical terminology would be understood by its community.

Mr. Hunter stated that he had visited the site for the first time during the week of his evidence. Having heard the evidence of Messrs. Mitchell and Chilian and based upon his observations, it is his expert opinion that every attempt was made to spud the well and that in fact, it was indeed spudded. Mr. Hunter stated that from the time the drill bit on the cable tool drilling rig hit the dirt "the

fuse was lit". Had Mr. Mitchell drilled a hole one foot into the ground, that in his opinion would have constituted a spud. If Mr. Mitchell's version of the facts is accepted, namely that he was at the site with the cable tool rig, then what was done constitutes spudding. Mr. Hunter gave an interesting opinion on the meaning of spudding - namely that the installation of casing is not essential to constitute the spud situation. The fact that a 13 1/2 inch pipe which was not in the drilling program was used does not create a problem with his opinion that the well was spudded.

Mr. Hunter stated that he reacted with disbelief at the MNR inspection finding that there had been no spud, feeling that MNR was reacting to a minor point. The rig had been there and effort had been made with the drill. In his opinion, all of the other issues raised are simply needless enforcement.

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Asked whether it was unusual for an inspection to take place during the final day of a permit, Mr. Hunter stated that it is more likely that one would attend afterward to determine what had occurred. He stated emphatically that he would not ever have gone out in such a case, unless he had been specifically asked to.

As to the benefit of leaving the soil in the casing, even with the spool in place, he stated that small children could fall down such a hole. A rig would remove the soil "in a heartbeat". Mr. Hunter reiterated the evidence of Messrs. Chilian and Mitchell that the 13 1/2 inch casing would be useful, as light sand was involved at the surface, and it would provide a conduit for continued drilling. Such casings are sometimes used after the fact. There can be sloughing and leaching of the gel material used in drilling and the driller doesn't want the gel to escape, as it can be expensive.

Under cross-examination by Mr. Wilkie, Mr. Hunter could not recall an incident involving an inspector named Mr. Rod Korea or a driller named Mr. Harold Brett, where spudding was an issue. Mr. Hunter was also asked whether, in the recent government downsizing he had filed a grievance against the Ministry of Natural Resources and whether Mr. Steele had ended up with his old job, to which he replied that he was not sure and didn't know if it was a direct match.

Mr. Manocha, a professional engineer, has been with MNR since 1989 in the capacity as both a caverns and storage engineer and a brine resources engineer. His work includes reviewing drilling programs, providing technical support to staff and acting as an inspector to ensure compliance with the **Act**, regulation and standards. Mr. Manocha was recognized as an expert, qualified to give expert evidence in the matter of well drilling.

Mr. Manocha stated that he visited the site in January, 1998 with a view to determine whether the well was spudded and having formed his opinion, he felt that the public interest was at stake.

Having seen the site, as described above, Mr. Manocha came to the conclusion that the well had not been spudded. He stated that he did not know what the 13 1/2 inch pipe was for. Based upon his visual inspection, he stated that when preparing the site for drilling with a rotary rig, there are

a number of processes which are common in the industry. These include drilling in a rat hole, a mouse hole and a conductor pipe. The rat hole, or kelly, is used as an integral part of operations. The mouse hole is used to put the drilling collars in and the conductor pipe is used to keep the ground from sloughing in.

Based upon what he saw at the site, Mr. Manocha stated that in his opinion, the site was prepared for drilling. His reasons are set out in his Memorandum to File dated March 5, 1998 (Ex. 24), which sets out in part:

The site looks to have been prepared for drilling a well. The site itself appeared to have a drilling pad prepared. The road appeared to be constructed to provide access for drilling operations. Mr. Steele removed the cover from a pipe which appeared to be a location for the well. The pipe was approximately 13" in diameter. Mud/Clay

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was visible in the pipe at a depth of about 6 feet. No estimate on the what (**sic**) was the depth to which this pipe was set. There was no visible evidence of any drill cuttings or drill pits in the immediate well site area. There were no fresh scouring marks noticed inside the pipe which would indicate recent drilling activity within the pipe. The pipe did not appear to be cemented in place. Photographs were taken by Mr. Steele of the site and the pipe in the ground.

Based on what I observed, it is my opinion that the site had been prepared for drilling operations. Review of the drilling program did not indicate that a 13" Pipe was to be driven into the ground. How-ever, in the oil and gas industry, it is common practice to put in such a pipe to keep the ground from sloughing-in prior to drilling the well.

Mr. Manocha stated that it would not make a difference whether the 13 1/2 inch pipe was put in after the cable tool rig drilling was completed, as it was only a conductor pipe. The basis for the distinction was that actual drilling began only after site drilling had been completed. It is a common practice to have conductor pipes brought in, even by truck-mounted small rigs. The actual drilling rig can then come in.

The spudding is what sets off notices to the inspectors that the drill rig is moving on site as per the drilling program. The source of this opinion is the regulatory requirement, coming from the industry and the regulatory side. Spudding is the notice that the actual drilling will commence. Mr. Manocha agreed that, from his years of experience, his definition of spudding is correct, rather than the one used by Metalore.

Commencement of drilling requires that the mud tanks or sludge pits are ready, so that when the water and mud used in drilling comes back to the surface, it can be put in. The driving of a conductor casing is not spudding, but a separate and distinct activity, a conclusion which Mr. Manocha said he drew the instant he saw the site. Mr. Manocha stated that his conclusion was supported by many publications, one of which was entered in evidence (Ex. 25: *Oil and Gas Investor*, Donley "Prep to Spud" (undated) and read into the record from page 35:

And then there's the mud, whose handling calls for a series of containment pits. Contractors sometimes carry metal tanks for this purpose; these are common in environmentally sensitive areas as well as on locations with rocky or hard-to-dig surfaces. A combination of bulldozing and diking up the earth remains the most popular procedure, however. The usual location design calls for several mud, or slush, pits; these comprise containment pits for rock cuttings (shale pits), a reserve pit for waste disposal, and a mud-return pit from which the drilling fluid returns to the borehole.

In addition to the mud pits, two more holes must be dug. Labelled the mouse hole and the rat hole, these will hold equipment

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once the rig is on location. The mouse hole, drilled directly under the derrick floor, will house the next length of pipe awaiting connection to the drillstring once operations start. The rat hole, cased to extend above the derrick floor, serves as the storage place for the kelly, a steel member some 30 feet in length and square or hexagonal in shape. When in use, the kelly hangs from a swivel in the derrick and is connected to the drillstring; lowered into the rotary table, it allows the drillpipe and bit to be turned and hole to be drilled.

On occasion, a small rig known as a spudder is contracted to drill these two rodent holes. More often, the drilling contractor handles this chore himself after moving in his rig.

Before spudding, the contractor may also set a length of largediameter casing, usually less than 100 feet. Necessary to keep the top of the borehole open in some areas, this is called conductor pipe. Setting this casing may involve drilling a hole, then lowering and cementing in the conductor. In softer ground, the pipe is usually driven with a pile driver or diesel hammer using rig equipment.

Finally comes time for MI & RU.

This drilling report notation stands for moving in and rigging up. Once, rigging up entailed building the derrick from the ground up. In rare cases, as with large rigs for ultradeep drilling, it still does. But rather than the old piece-by-piece assembly, construction is by sections, like segments in an erector set.

More common today is the jackknife, or cantilever mast, rig. This is assembled on the ground, then raised to its vertical position by means of the rig's hoisting mechanism, known as the draw works. Jackknife rigs used for shallow or moderate drilling depths are often truck-mounted. With the rig up, surface casing on the racks and mud chemicals delivered, the engineer heads for the nearest phone. "Prep to spud," he tells his office.

That's the magic phrase. Soon, rig hands will lower the pipe into the hole, and the drill bit will start turning to the right, several steps closer to this prospect's moment of truth.

Mr. Manocha stated that this article conforms to his information of what constitutes spudding and that it was not done in this case.

Under the prior legislation, spudding did not serve to extend the life of a permit; rather, if the operator had commenced drilling, he would get a new permit. That was the situation when Mr. Chilian received his permit, although it has been deemed to be a licence under the new **Act**.

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As noted, a licence costs \$100.00 plus GST. Around 100 licences are issued a year, and about 20 return for a new permit for the same location. Mr. Manocha stated that he had never seen such a rush to spud. As for additional paperwork with the new legislation, the only thing required is a well schematic, showing the casing, cementing and geological formations. All other information required has already been provided with the original application. If there was time pressure, a licence for renewal could be issued within a few days, but where additional information was required, it could take longer. Mr. Manocha stated that the permit or licence is good for 366 days, which is a reasonable time to drill a well, allowing the operator some leeway for changes and approvals.

Mr. Manocha stated that there is nothing magical in the approvals process, either for the licence or the ongoing changes. It is necessary to monitor the opportunity given to an operator to drill with potential changes which occur at the well site; new information from other drilling programs; discoveries that drill casings are not working; or changes to blowout requirements due to encountering gas in drilling. Mr. Manocha stated that changes have to be monitored.

Mr. Manocha stated that he was concerned about the broad, all encompassing definition of spudding which Metalore is advancing. It would allow a permit to continue to hang around forever, without any further obligation to complete the well. Flowing from this, land can be tied up in leases which will isolate formations which are not put into production. MNR considers this a policy issue which it does not wish to see become common practise.

Under cross-examination, Mr. Manocha stated that he knew Mr. Hunter as a former inspector; recognized that he had considerable experience in inspections, but could not comment on his expertise in rotary drilling rigs or otherwise.

Mr. Manocha discussed the transition provisions between the old legislation and the new **Act**, agreeing that the new governs this permit or deemed licence. Mr. Manocha stated that, while the permit no longer would be seen to have expired on December 17th as it once would have, the

operator is prohibited from drilling other than in accordance with approval of changes made to the drilling program or application.

Mr. Manocha discussed the definitions of spud and spud in, as set out in the **Risvold** case. He stated that it is a term which is well known in the oil fields, but the definition is not one which either regulators or operators feel is appropriate. The actual meaning is to be the actual commencement of drilling, which does not extend to having a conductor pipe in place. Mr. Manocha agreed that he had reviewed the Operating Standards, which says nothing more than to start drilling a well. Mr. Devereaux asked whether, if the 20 foot hole had been drilled precisely where the well is to be located, with a cable tool rig, could it be a well. Mr. Manocha replied that this could be the case only if it was in accordance with the licence and drilling plan. The first part of a hole can be 1,200 feet deep. If it was done as part of site preparation and using a conductor pipe, it would not be spudded. That is the basis upon which all approvals are given.

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Mr. Devereaux suggested that these are two separate issues, namely the works surrounding the well and the spudding. Mr. Manocha stated that, based upon what he observed, the site had been prepared for drilling, but drilling had not begun. He stated that there is drilling and there is drilling. Mr. Manocha stated that it was not necessary to drill a hole with a rotary rig, as it was possible to drill with cable to bedrock in Ontario. However, the requirement to spud is to drive the cable and casing into bedrock, in this case, some 79 metres. The hole drilled did not necessarily mean that it was the well; given its depth, it could have just as easily been a rat hole.

As long as all that was installed was a conductor pipe, then the commencement of drilling had not begun. Mr. Manocha agreed that it was possible to start drilling with a cable tool rig and then determine that it was necessary to put in a conductor pipe to keep the ground from sloughing out, saying that it is a good practice.

Mr. Manocha stated that had Mr. Mitchell used a portable rotary rig, drilling to a depth of 22 feet without putting in a conductor pipe, and removed the rig because it was needed elsewhere, as long as the site was prepared with the mud hole, it would depend on the context as to whether or not the well had been spudded. Removing the rig is a problem as it is written into standard contracts for the contractor to commit to having the rig on site for a set period of time. Depending on the context, Mr. Manocha stated that while using a cable tool rig, the operator would need to drill to bedrock in order for the well to be spudded. Had bedrock been at 22 feet, then the case would be looked at differently. Mr. Manocha agreed that it is necessary to drill to bedrock for a well to be spudded, stating that there is an expectation that when one goes into a site, they will complete the job.

Mr. Manocha reiterated that the concern was not with what had been done or the type of rig that was used, but the significance of a piece of pipe which was not part of the application. Mr. Devereaux suggested that the drilled hole without the offending pipe would have been spudded and the conductor pipe should not offend this fact. Mr. Manocha agreed that if the mud pit had been set up,

with the sump in place and if there was evidence that they had actually started drilling the well, it would have been different. If the pipe driven into the hole had been what was specified in the drilling program rather than the 13 1/2 inch casing, Mr. Manocha stated it would not be spudded. To spud, it would have to go down the 79 to 88 metres to bedrock, with cementing.

Referring to the article, Mr. Manocha agreed that it is not always necessary to have a mouse hole or a rat hole in Southern Ontario, but they are generally the first step. He stated that the majority of rigs he has seen do not have it. In the case of this application, Mr. Manocha stated that MNR does not hear about the creation of such holes, as they are temporary. However, he didn't know what the hole was at the Metalore site, nor did he ask.

Asked about the public interest matter, Mr. Manocha stated that time limits are put on licences for a variety of reasons. Operators are not permitted to go in, perform a modicum of work on a well and then stop, return later, then stop. If a well is not completed, there is a notification period to remove the rig, because MNR wishes to ensure that the work is completed in a reasonable time. The thing MNR is guarding against, in finding such wells as this not spudded, is to ensure that an operator doesn't just do a small amount of work. Therefore, MNR ensures that it is not open to abuse. It is a

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balanced decision. If a licence expires, which is common, it costs only \$100 for a new one. Even if spudded, however, it doesn't relieve the operator from completing the well expeditiously. Most operators are reasonable in this regard. Sections 7 and 7.01 of the **Act** allow the inspector to intervene. MNR looks for a **bona fide** effort, where the drilling program has been followed. Mr. Manocha stated that MNR expects that the drilling program will be followed for many reasons, including public safety.

Mr. Devereaux suggested that the new applications process is much more detailed than the permitting process, involving some 50 pages of geological prognosis. However, Mr. Manocha stated that the same rules apply as before, but now the industry is aware that they should put more information in their applications.

Submissions

Mr. Devereaux stated that the evidence is very straightforward, but involves a very significant issue for Metalore. It has been suggested that all Metalore had to do was pay the \$100 fee to reapply for a new licence and indeed there is some suggestion that the fee might have been waived. Instead, it is involved in these protracted proceedings. The reason for appealing has been described by Mr. Chilian, who has been in the oil and gas business since 1964, namely that he believed that he had done what was required under the **Act**. He further believed that MNR, through its declaration of expiry of the permit, and moreover its manner in so doing, was treating Metalore unfairly. It is for that reason that Mr. Chilian has brought this matter forward.

It has been agreed upon that if Well #89 had been spudded on December 17, 1997, the licence would still be valid and would still be in effect for drilling. It is for that reason Metalore believed the well had been spudded and that all of the witnesses were called, in an attempt to determine the meaning or definition of spudding.

The definition found in the Alberta case of **Risvold** is to penetrate the surface of the well with the drill in place. In addition, Metalore put in the definition in the Operating Standards, to start drilling a well. Mr. Hunter, an experienced inspector, gave his opinion that the well had been spudded, stating that the definitions provided (Ex. 1, Tabs, 4, 5 and 7) were appropriate. Messrs. Chilian and Mitchell, though not experts but with considerable experience, had similar definitions of spudding. Mr. Steele agreed that they were acceptable definitions while Mr. Manocha gave rise to an issue. Mr. Manocha did agree that he reviewed the definition. Mr. Manocha, however, did try to expand on the obligations beyond the written definitions. I have only his statement, with nothing to support his assertions, that spudding is as he says. Furthermore, Mr. Manocha's position is contrary to that of the other witnesses.

Turning to the facts, Mr. Mitchell worked on the well, described what he had done with the cable tool rig, that he used it to drill a hole into which the casing was driven. At the end of the day, there was a hole and a pipe in the ground. The dirt was left in the casing for safety purposes, which can be regarded only as prudent, particulary as the rig was to be removed and Mr. Mitchell would be returning with the rotary rig.

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Mr. Devereaux submitted that the initial issue was with what happened on December 17th. Mr. Steele's confusion with what happened on the ground was significant, as upon learning that a cable tool rig was used, the fact that drilling actually took place was no longer disputed. Applying the facts of what took place to the decision in **Risvold** and to the definition in the Standards, in his submission, leads to the conclusion that a drill penetrated the earth. According to either definition, spudding was accomplished. A well was started. He submitted that there

cannot be any doubt that drilling was done and that the hole was started. As to whether it constitutes the drilling of a well, or its commencement to drill, Mr. Devereaux submitted that the only conclusion which can be reached is that the well was spudded. This is supported by Messrs. Chilian and Mitchell, both having considerable experience.

Turning to the evidence of Mr. Steele, Mr. Devereaux suggested that it is difficult to sort out what he believed on December 17th and now. Mr. Steele admitted that he did not know what took place at the site and his decision was made without knowing that a rig had been at the site. Mr. Steele has now agreed with the crucial facts and the definitions, yet in spite of that, would not agree that what Metalore had done constituted spudding. Mr. Devereaux submitted that this is illogical. However, it was pointed out that, words and definitions aside, Mr. Steele did agree that Metalore did penetrate the soil with the drill in place.

Mr. Devereaux submitted that, as to the evidence of Mr. Manocha, while he didn't accept evidence of spudding, he was vague as to what the actual requirements would be. Setting casing to bedrock to 80 metres is not a requirement set out in the Operating Standards, although there is no depth indicated. However, Mr. Manocha's definitions are vague and do not fit with the Operating Standards. Given what Mr. Manocha says are the requirements of the well, it is not surprising that he persists in the view that this well has not been spudded. Mr. Devereaux submitted that Mr. Manocha's

definitions are not the correct ones, let alone the ones required by the legislation and should not be given any weight.

With respect to spudding, Mr. Devereaux submitted that there cannot be any doubt that the well was spudded on December 17, 1997, which leads to a concern that the question of the manner in which this whole matter came about. Mr. Steele admitted in his evidence that he was not sure what happened at the well site, nor did he pick up the phone or attempt to contact Metalore to see what had been done. Furthermore, he did not seek any details, or even to say that he had concerns. His letter of December 18th simply required that Metalore apply for a new permit. Mr. Devereaux submitted that this should not have been done. If Mr. Steele was unsure of the facts, he should not have issued a decision. Then, when Mr. Chilian contacted him, Mr. Steele failed to give due consideration. Mr. Devereaux submitted that, if Mr. Steele was unsure, he should not have issued a decision, or he should have realized that a drill had been used and by logical conclusion, that the well had been spudded.

Mr. Wilkie submitted that the simple question to be determined is one of law or an interpretation of the law, namely whether Well #89 was spudded. The evidence heard is conflicting. Witnesses have been heard who say that spudding occurs when the drill bit touches the soil. MNR's position is that everything which took place was preparation to drill, and spudding would not take place until a rotary drill bit was brought to the site and penetrated the soil.

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Mr. Wilkie submitted that these issues have been dealt with by the courts before and to the extent that they conflict with the established law, it must be ignored. In **Risvold v. Scott**, Mr. Wilkie referred to clause 4 of the lease, found at page 239 of the decision ([1938] 2 D.L.R. 238), which states:

4. The lessee hereby covenants, promises and agrees that he shall and will commence the erection of a derrick, will install proper and adequate drilling equipment and machinery as soon as possible, and shall and will commence actional drilling operations on the said lands, but not later than the 31st day of December, 1936 A.D. of ninety days from date of execution hereof, whichever of said dates may be later.

Mr. Wilkie submitted that the word, "operations" is very important in the lease and in the decision, referring to the introduction of the judge and quote from Summers on Oil and Gas on page 242 and 243, which notes that commencement of drilling operations does not require that actual drilling be done. The Court is satisfied that drilling operations commenced, notwithstanding that there had been no drilling. The Court discusses the term "spud" in the final full paragraph on page 243:

Considerable evidence was given as to the term "spud in." This is a well known term in oil fields and means penetrating the surface of the soil with the drill in place. There seems to be some force to the argument that if the parties had so intended they would have used the well known term which designates that operation. On the whole I am inclined to agree with Mr. Davies as to the meaning of the words "commence drilling operations," and with the view that the rule as stated by Summers above set out is applicable to the facts of this case and the language use, I therefore hold that the defendant company did not commit a breach of the agreement.

Mr. Wilkie submitted that this case stands for the proposition that if the parties had wanted to use the word "spud" they could have used it, with the Court giving its definition; instead the parties used the phrase "commence mining operations" which has a distinct and separate meaning.

In **Canadian Superior Oil Ltd. et al. v. Crozet Exploration Ltd.** (1982) 133 D.L.R. 53 (Alta. Q.B.), similar facts are found. An access road and well site area was prepared. Gravel for purposes of stabilization was brought in. The sump pits were commenced, although it is uncertain that they were completed. The rat hole and mouse hole were drilled. The rigging up commenced and finally, on the day after the primary term expired, spudding in occurred. Mr. Wilkie submitted that all that took place prior to the spudding and was leading up to drilling operations. The facts of this case provide some frame of reference to what may be considered as activities leading up to but prior to the spudding of a well.

In **Oil City Petroleums (Leduc) Ltd. et al. v. American Leduc Petroleums Ltd. et al.** [1951] 3 D.L.R. 835, the wording at issue in the contract is the meaning of "commencement to drill" which Mr. Wilkie submitted was the issue. Portions of the Supreme Court of Canada's decision were read into the record, commencing at the bottom of page 840:

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The trial judge found that an oil well was not commenced by the plaintiff company, the operator, within the time limited by the agreement. The evidence supports this finding, but in saying this I do not find myself in accord with the view expressed in the trial judgement that there was lack of good faith on the part of the plaintiff Campbell in doing what he did in his endeavours to commence the drilling of a well in time. I make this statement after a careful review of his evidence, and consideration of the difficulties he faced in getting casing and a drilling rig to commence drilling operations in time. I think it was a case of his having undertaken to do more than he was able to accomplish. However that may be, he admitted at the trial that he had no formal contract for drilling the well. What he relied upon for a contract were two letters between himself and a drilling company, which were not filed as exhibits so as to show what they contained. What he had done on the well site, which he said he hoped would constitute the commencement of drilling, consisted in preparing the surface ground, and sinking a 30-inch hole about 300 ft. deep with a short piece of casing in it, and a water tank located nearby. This might be regarded as a preparation to drill, but not as "commence-ment of drilling" as required under the agreement.

Mr. Wilkie reiterated that, like the facts of the current matter, the hole punched in the ground constituted preparation to drill and not the commencement of drilling.

Mr. Wilkie drew attention to three additional cases filed (Wetter (Executrix of Wetter Estate) v. New Pacalta Oils Company Limited et al. (1950) 2 W.W.R. (NS) 290 (Alta. S.C. A.D.);

Lang v. Provincial Natural Gas and Fuel Co. of Ontario v. Lang et al. (1908) 17 O.L.R. 262; Wulff et al. v. Lundy et al. [1940] 1 W.W.R. 444 (Alta. S.C. A.D.)), inviting that they be examined. The only conclusion which could be drawn is that the Courts did not come anywhere nearing finding that a mere punching of a hole in the ground could be considered the spudding of a well.

Mr. Wilkie concluded by submitting that the well was not spudded and that that was supported by the evidence of three independent witnesses. Mr. Manocha stated that the site was simply prepared for drilling, but it would require a rotary tool rig on the site, which is further confirmed by the paper presented in his evidence. Mr. Wilkie stated that the Supreme Court of Canada agrees with this position as well. Mr. Wilkie submitted that this case is really about the commencement of drilling, and that there is ample authority to support the finding that the well was not spudded.

Finally, Mr. Wilkie stated that this case is really about regulatory intimidation, whereby MNR has attempted to impose the law on Metalore which retaliated with a three million dollar law suit. In the future, any inspector will be intimidated to enter a site where Mr. Chilian is involved.

Mr. Devereaux made several preliminary comments by way of reply, which were augmented by written reply. The following is a combination of elements from both. He submitted

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that, according to **Risvold v. Scott**, spud in means something different than commencement of drilling operations. Of the five cases submitted by MNR, four do not contain the word "spud". For example, in **Oil City Petroleums v. American Leduc**, it is the words, "commence drilling a well ... and to carry on drilling continuously". Mr. Devereaux submits that the parties must be presumed to mean something different than spud and discussion of what was meant by the phrases used is of no assistance. Mr. Devereaux further distinguished that case in that there was no contract to drill, whereas Metalore did indeed have such a contract, so that "some initial drilling ... did not count as the "commencement of drilling"" [para 12, Reply, marked as Exhibit 27]. In both **Wetter v. New Pacalta** and **Wulff v. Lundy** there is no definition or discussion of spudding and in fact no drilling took place, therefore those cases are of no assistance.

Mr. Devereaux submitted that **Lang v. Provincial Natural Gas**, although not providing a definition or discussion of spudding, provided that the lease would expire if the well has not been commenced. "The Court held that "some work was contemplated to be done upon and in the ground -- "breaking the ground" in order for the well to have been commenced" [Para 15, Reply, Ex. 27). He concluded that this case supports Metalore's position.

Similarly, although **Canadian Superior Oil Ltd. v. Crozet** involved interpretation of a phrase other than spudding, it also states that a well is spudded when "the surface of the ground was broken with the rotation action of the drill bit" [Para 17, Reply, Ex. 27].

Mr. Devereaux further distinguishes the cases as involving disputes between private lessors and lessee, which are to be interpreted strictly in favour of the landowner against the lessee. However, this matter involves a licence, which requires spudding within a year, which although may be

for the public interest, limits the collective rights of Metalore and the landowner. He further submits at paragraph 22 (Ex. 27):

Statutes which encroach on the rights of the subject, whether as regards person or property, are subject to a strict construction in the same way as penal Acts. It is a recognized rule that they should be interpreted, if possible, so as to respect such rights, and if there is any ambiguity the construction which is in favour of the freedom of the individual should be adopted. (**Collet v. The Queen**, [1981] 1 S.C.R. 2 at 10, quoting **Maxwell on Interpretation of Statutes** (12th ed.), p. 251

Mr. Devereaux submitted that the cases relied upon by MNR would have a strict construction against the lessee and cannot be used in determining the meaning of the word "spud". He states at paragraph 24:

24. The word "spud" must be given an interpretation, if possible, that will respect Metalore's right to drill the well. The *Risvold* case and the evidence led by Metalore regarding the meaning of "spud" provide a clear interpretation of the word that those respect Metalore's rights, namely, *penetrating the surface of the soil with the drill in place*, and nothing more. If there is any ambiguity in the25

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definition of "spud", the construction which favours Metalore's rights, that is the construction which would find that the Well was "spudded' must be adopted.

Mr. Devereaux concluded his submissions by stating that subsection 3(2) of O.Reg. 245/97 does not provide discretion as to the expiry of the licence. If it was spudded, it does not expire.

Mr. Wilkie provided written reply to the three issues contained in Mr. Devereaux's reply, namely that the cases provided do not deal with the word "spud"; that the courts would construe conditions of a lease strictly against a lessee and that the legislation in limiting the rights of Metalore should have any ambiguity resolved in its favour.

Mr. Wilkie commenced with an excerpt from **Oil City Petroluems v. American Leduc**, where the activities discussed in detail in his submissions above are characterized by the Court as being "regarded as a preparation to drill", but not as the "commencement of drilling" as required under the agreement." He states, commencing at the top of page 2 of his reply (Ex. 28):

> It is conceded that the case does not define the word spud. However, it is submitted that the case does provide important context and insight into the world of oil and gas drilling. For example, to those not familiar with the industry, the drilling of a 300 foot hole would appear to satisfy the obligation to commence drilling, yet the court found that it did not. It is submitted the decision is relevant because it supports Mr. Manocha's opinion that installing a

conductor casing does not constitute commencement of well drilling, nor does it constitute spudding of the well. It is submitted that the decision clearly supports the expert opinion of Mr. Manocha that installing a conductor casing as part of site preparation.

Metalore has also attempted to distinguish this case on the basis of the wording of the lease which required the operator "*to carry on drilling continuously*". Metalore appears to suggest ... that the words ... had some affect (**sic**) on the court's decision. A close review of the decision shows that was not the case, because the court was satisfied that the drilling had never commenced.

and with reference to Canadian Superior Oil Ltd. v. Crozet also on page 2:

The Ministry submits that Metalore is ignoring a significant part of the definition, that is, that the ground is broken by "*the rotating action of the drill bit*". The Ministry submits that in the case before you, as of December 17, 1997, the surface of the ground at well #89 had not been broken by the rotating action of the drill bit, but instead had been broken by a bit from a cable tool rig. The drilling program submitted by Metalore, through which the Ministry granted approval to drill, did not mention the cable tool rig

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drilling this part of the well, nor did it mention the hole size or the casing it pushed in the hole. It is submitted that according to the definition used in **Canadian Superior**, well #89 as not spudded.

While noting that the definition of spud is strictly obiter dicta in **Canadian Superior**, it is consistent with the evidence provided by Mr. Manocha - where a well is to be drilled using a rotary rig, the well will be spudded when the bit on the rotary rig breaks the surface of the soil and not before.

It is submitted that **Canadian Superior** does not support the opinion of the witness Mr. Hunter, who testified that a well is spudded as soon as a drill bit touches the ground. When you read about the efforts taken by the operator in that case to commence drilling operations before the lease expired, those efforts stand in contrast to Mr. Hunter's liberal views of what constitutes a spudded well. In **Canadian Superior** the rat hole and mouse hole were <u>drilled</u> at the well site a few days before the expiration of the permit. These holes were obviously drilled by some piece of equipment other than the derrick which would eventually drill the well. It begs the question why the operator, given the rush situation he was in to comply with the lease, did not use that same piece of equipment to break the surface of the ground at the spot where the well was to be drilled. A likely answer to that question is that the operator knew that

nobody would have accepted such an action as a commencement of drilling operations, let alone the more onerous requirement of spudding the well.

and with reference to Risvold v. Scott, commencing on page 3:

In **Risvold** the court did not have to decide whether a well had been spudded. The court also did not have to decide whether, where a permit is given to drill a well using a rotary rig, use of a cable tool rig to drill a small hole for the purpose of preserving the permit would constitute spudding the well. The issue in **Risvold** was the definition of the words "commence drilling operations", and the court's comments regarding"spud in" were obiter dicta. That is not to suggest that **Risvold** is of no assistance, to the contrary, it is submitted it provides important context that is helpful in determining the issues before you.

In **Risvold** the well operator was obliged to "commence drilling operations" by December 31, 1936. By December 31, he had:

"procured a lease of 10 acres of the surface rights from the owner, had dug a cellar - a large hole about 10 ft. by 12 ft. and from 12 to 15 ft. deep - and cribbed it and completed it with a runway, had made contracts for the erection of the derrick, had placed some of the equipment on the ground, had made contracts for the use of the required equipment and had set the drilling contract."

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The court was satisfied that the operator had commenced drilling operations under these circumstances. It is obvious that the court considered "spud-in" to be a more onerous requirement than "commence drilling operations".

The court defined spud-in as "*penetrating the surface of the soil with the drill in place*". Metalore relies on this definition of spud-in and says that it supports their argument and is a complete answer to the issue before you. It is submitted by the Ministry that the definition can also be read to support it's position. If you look at the context of that case, where the operator is hurrying to erect a derrick which will ultimately drill the well, the words "with <u>the</u> drill in place" take on some importance. It is submitted that "the drill" the court is talking about is the derrick that will drill the well, not just any drill brought on to the site to make a small hole to preserve the lease.

Mr. Wilkie concludes his submissions on the cases on page 4:

In this hearing you are asked to determine whether the actions of Metalore at Well #89 on December 17, 1997 constitutes the spudding of that well. It is acknowledged by the both parties that the word "spud" is an industry term. The evidence during the hearing showed that on December 15, 1997, Metalore

contracted with David Mitchell to drill the well, but shortly thereafter they realized that Mr. Mitchell's rotary rig was not operative. In an effort to preserve the licence, on December 17, 1997, a cable tool rig was used at the well location to drill a hole into which was pushed a 13" casing. Neither the cable tool rig nor the 13" casing were mentioned in the drilling program under which Metalore obtained its drilling permit. The evidence showed that it is a common practice in certain soil types to install a temporary "conductor casing" to prevent the soil from sloughing into the hole during drilling.

You heard the conflicting evidence of two expert witnesses regarding the definition of the word "spud" - Mr. Michael Hunter for Metalore, and Mr. Jug Manocha for the Ministry of Natural Resources. The opinion of Mr. Hunter was that the well was spudded as soon as the bit on the cable tool rig touched the ground. It was not necessary that the rig dig to any specific depth, nor that the casing be put into the ground. He said that you would need to have witnesses to verify that the cable tool rig bit actually hit the ground (because it would not necessarily be obvious from physical observation of the site). Since, in this case, the cable tool rig had dug a hole to the depth of twenty feet, he concluded that the well had been spudded.

Mr. Manocha testified that in order to constitute spudding, the rotary rig would have to be on site and the rotary rig would have to start "making hole". He testified that the sinking of a conductor casing using a cable tool rig was part of site preparation and did not constitute spudding. He had reached this conclusion based on a site visit in January, 1998. He confirmed that opinion in his memo of March 5, 1998 (Exhibit #24).28

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The Ministry submits that Mr. Manocha's evidence regarding the industry definition of "spud" should be accepted over that of Mr. Hunter. It is the position of the Ministry that this well site had been prepared for drilling but had not yet been spudded at the end of the one year licence period.

The cases discussed above do (**sic**)not conclusively resolve the issue, however, they provide important context. Mr. Manocha's opinion, derived from his considerable experience in the industry is completely consistent with that case law. Mr. Manocha's opinion is also consistent with industry practice as discussed in the Oil and Gas Investor article (exhibit #25) sub-mitted by Mr. Chilian to support its claim, it is consistent with the position the Ministry had taken in an earlier case, and is consistent with the policy objectives explained by Mr. Manocha. The primary policy objectives are:

1) ensuring that the site conditions under which the approval was granted remain at the time the drilling takes place, and,

2) protecting land owners from manipulation of their leases by operators.

It is submitted that you should accept Mr. Manocha's definition and apply it (sic) the facts in this case.

2. In the cases provided the court interpreted the conditions of a lease agreement strictly against the lessee.

Metalore argues that cases involving interpretation of a lease "*cannot*" be used in construing the word "spud", because the courts employ a strict construction against the lessee (the operator) in those cases. In repose, MNR submits the following:

First, if Metalore's position was accepted the result would be two different definitions of the word "spud" - one applicable to leases, and the other to nonlease situations. To "spud a well" to preserve a lease a company would have to erect a rotary drilling rig and start drilling the hole (all the associated steps outlined in **Canadian Superior Oil v. Crozet**, at p.56-57), yet to "spud a well" to preserve a licence the operator would only have to drive on the drill site and touch the ground with a cable tool bit, then leave minutes later. It is submitted that this development in the law would be illogical, confusing and totally unnecessary where the word spud is an industry term which has so far been utilized without a great deal of difficulty.

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Second, the rule regarding strict construction is only mentioned in one of the cases provided (**Canadian Superior Oil v. Crozet**), and was not strictly applied even there. The rule appears to have been formulated in 1957 in **Canadian Fina Oil Ltd. v. Pashke**, which was decided <u>after</u> the other decisions provided. Certainly, there is no mention of a rule of strict construction in the other cases provided to you.

Finally, the rule favouring strict construction is not a general rule that is applicable to all leases, it is a specific rule which came into effect because of the nature of oil and gas exploration. It is a rule which therefore applies to the industry regardless of the situation. It appears to have been formulated in **Canadian Fina Oil Ltd. v. Paschke**, for the following reasons (at p.476):

"...the people of this Province have seen hopes and values dashed when a few strokes of the bit found salt water where oil had been hoped for, whereas in the other fields they have seen what was in common parlance called a "cow pasture" turned overnight from areas of hope alone, to reservoirs containing thousands of barrels per acre. It is implicit in the search for oil, and indeed in its production and marketing, that events affecting these activities can occur with great suddenness and unpredictability. In consequence there are heavy shifts of value and necessary new, almost instant re-appraisals of ventures to be undertaken."

The Ministry submits that all of the cases provided are applicable and that you should utilize them to the extent that they are relevant and helpful in determining the issue before you.

3. In this case the legislation limits the rights of Metalore and therefore any ambiguity should be resolved in favour of Metalore.

Metalore submits that, as a matter of statutory interpretation, any ambiguity in the definition of "spudding" in the regulation should be determined in favour of Metalore. It relies on the case of **Colet v. The Queen** to support that principle.

It is important to note that the **Colet** decision was made in the context of a search conducted by the police for firearms in a Mr. Colet's home. The police had obtained a warrant pursuant to legislation that allowed them to <u>seize</u> firearms, but did not provide any authority to enter a home and search for those firearms. The Court found that the word "seize" in the legislation did not confer a power of search. The court provided some important context to its decision at p.8:

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"...what is involved here is the longstanding right of a citizen of this country to the control and enjoyment of his own property, including the right to determine who shall and who shall not be permitted to invade it. The common law principle has been firmly engrafted in our law since Semayne's case in 1604 where it was said "That the house of every one is to him as his castle and fortress, as well for his defence against injury and violence, as for his repose..."

The court found that the legislation should be read in a restrictive manner because it interfered with the centuries old right of every citizen to be secure in his own home. It is also important to note that a restrictive interpretation of <u>criminal</u> legislation has long been a part of the law of Canada, and the **Colet** decision is consistent with that tradition.

It is respectfully submitted that **Colet** is totally, wholly, absolutely inapplicable to this regulatory hearing regarding Metalore's commercial well drilling activities and the definition of "spud".

It is submitted that the case before you is not one where ambiguities in the legislation must be resolved in favour of Metalore, nor, on the other hand, is it a case where you are required to have any deference for the decision of the inspector, Mr. Steele. The wording of section 7 of the OGSRA makes it clear this is a trial de novo. It is the position of the Ministry that the legal onus in this case rests with Metalore, as the appellant, to prove on the balance of probabilities that it spudded well #89.

4. Conclusion

In conclusion, it is the Ministry's primary position that you should accept the evidence of Mr. Manocha over that of Mr. Hunter regarding the definition of spud, and find that Metalore did not spud well #89 as of December 17, 1997.

In the alternative, if you accept Mr. Hunter's definition of spud, the Ministry submits that spudding cannot occur until drilling activity takes place in accordance with the drilling program. Well drilling in the Province of Ontario is a prohibited activity that can only take place with the approval of the Ministry, and in accordance with the licence issued by the Ministry (OGSRA s.10(1)). When the licence was issued, the accompanying letter required that any changes to the drilling program be approved by the Ministry. Regulation 245/97, section 5, also requires prior notification and approval from the Ministry of any changes to the drilling program. Here, as of the expiry date, there was nothing done by Metalore on or in the ground (hole size, casing, drill used) that was authorized by the permit. If you accept Metalore's position that they were drilling the well, then it logically follows that they were drilling illegally, and that illegal activity cannot be relied on as spudding of the well.

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Findings

Spudding

Before analyzing the definitions of spudding or spud found in the various references, I wish to make a comment regarding the underlying tensions concerning this case, as well as the tendering of expert witnesses providing evidence at the hearing. I had hoped to make these findings without reference to the very real animosity which exists between Metalore and MNR, but have come to the conclusion that, while this should not impact on the findings, it nonetheless has coloured the evidence presented to a considerable degree.

Mr. Chilian strikes me as a very determined businessman who does not take kindly to those standing in the way of his efforts to accomplish what he has set out to do. His relationship with MNR and the inspectors is not amicable. Mr. Chilian's attitude and behaviours in relation to the drilling of Metalore #89 reflect this animosity (as do those of MNR, which I will also address further below). Mr. Chilian's actions in this matter, appear to have been predicated on this animosity and resemble determined or dogged resistance to being overly or arbitrarily regulated. For example, the naming of the drilling contractor on the application may not be regarded as an important component of the required information on the application, but it is required by that application and the Operating Standards. That it was changed by Metalore without prior notice or permission to a contractor who has been used by Mr. Chilian for some 25 years and must be most assuredly known to MNR should require nothing more than a passing comment. Undoubtedly, the purpose in MNR's approving such changes would be to ensure that a competent driller is engaged and nothing more. I cannot foresee what difficulty should be encountered by the change to a known drilling contractor, and approval can only be regarded only as a formality rather than sanctioning a change of significance.

There is little point in attempting an analysis of whether the various failures by Metalore and Mr. Chilian to obtain the approval of changes to the drilling program amount to a material flaunting of the **Act**, regulation or Operating Standards. There will however be a discussion of whether an action performed in a manner of non-compliance can amount to the required performance. Mr. Chilian's, actions in this matter have served to cloud what ultimately will be regarded as his clear intent. Intent is mentioned, as will be seen from the ensuing discussion and findings, as it does play a significant if not determining role in how the courts have regarded spudding, the commencement of drilling and drilling operations.

As to the evidence of two expert witnesses, Mr. Hunter and Mr. Manocha, while I have no difficulty in regarding their testimony as being very competent and within their area of expertise, I cannot help but wonder about the extent to which their evidence may have been coloured by the relationship between MNR and Metalore, or in Mr. Hunter's case, his own former relationship with MNR as a former deputy chief inspector. In spite of the information put before me, I feel that I would have benefitted from receiving additional expert evidence from a witness who is well removed from the parties in this matter. In my role as Mining and Lands Commissioner, under section 118 and subsection 119(1) of the **Mining Act**, I would be able to seek additional expert or scientific evidence upon which to base a decision, affording the

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parties the opportunity to respond to or cross-examine such evidence. I wish to state that I would have exercised this power in this case, had I not been acting as a Hearing Officer under the Act. I do note that Mr. Wilkie sought to summons an expert witness not employed by MNR, but powers of summonses are not granted to hearing officers, as the Statutory Powers Procedure Act does not apply to this hearing. However, in the course of completion of my analysis and findings, I do recognize that the case law and Operating Standards definition take precedence over industry definitions, so that the expert evidence as to the definition of spudding is not so significant as I initially had anticipated.

Therefore, I wish to qualify the findings regarding spudding that are made. To the extent that the findings may differ from what is commonly understood in the industry, I do not feel that they were made with the benefit of a full exploration of uncompromised expertise otherwise available. Furthermore, the exact drafting of the legislation, Operating Standards and applicable case law serves to illuminate this issue in a manner which may not be in keeping with the views of the industry.

Finally, the analysis and findings will be further tempered by the fact that what is being examined is the conduct under the terms of a licence, and not a lease. This may be significant, due to the exercise by the Courts in several of the cases, of its jurisdiction of relief from forfeiture, which jurisdiction as a hearing officer under the **Act** I do not possess. I do note that Mr. Wilkie very correctly suggested that one could not have one definition of spudding applicable to leases and entirely other definition to be applied to leases. The analysis and meanings attributed have to be consistent as between all of the related case law.

Preparation to Drill, Commencement of Drilling and Spudding

The language used generally in the drafting of the leases in the field of oil and gas is designed or intended to be designed to both allow drilling and provide for an exact time for the expiry of the opportunity granted can be described as deceptively simple and fraught with unforeseen complexities. This fact is illustrated by the various cases provided, as well as the language used in the Regulation and Operating Standards. The desired activity has been variously described as commencing to drill (**Leduc**); operations for or incidental to ...(drilling) with spudding in being through the breaking of the surface of the ground by the rotary action of the drill (**Canadian Superior**); commence drilling operations (**Wetter**); commencement of a well (**Lang**); to commence operations with a view to the drilling of a well and continuing the operations until the well is completed (**Wulff**); operations for the drilling of a well are not commenced (**Canadian Fina**); and commence actional drilling operations being distinct from spud in (**Risvold**).

Start Drilling a Well

Subsection 3(2) of O.Reg. 745/97 provides that a licence to drill a well expires unless spudded on its anniversary date, but does not offer a definition of "spudding a well". Section 2 of the Regulation provides that all works done by operators which may be governed by the **Act** must comply with the Operating Standards. There is a definition of "spud" in the Operating Standards, found at page 75 as "to start drilling a well".

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While I recognize that the meaning of spudding, spud or spud in may have a particular industry meaning, I find that the definition imported through the Operating Standards serves to change this meaning, by modifying or expanding it. This is accomplished by importing the term "start drilling" which I find to be similar, if not identical in meaning to the expression, "commencement of drilling". However, it is noted that the definition in the Operating Standards does not include the word "operations", which is also dealt with in some of the case law. Owing to the use of the phrase "start drilling a well" I find that many of the cases introduced by Messrs. Wilkie and Devereaux involving interpretation of these terms are relevant to the determination before me.

In considering the cases first as a group, the first thing I note is that the activities surrounding the undertaking to intended or purported completion of a well involve an assortment of tasks, some of which must necessarily be regarded as sequential and some which need be performed in no particular order. Therefore, for example, the clearing and levelling of the surveyed well site, the building of the road, as well as obtaining leases and permits or licences, payment of rentals, are all necessary precursors to bringing a drill bit into contact with the soil. Similarly, securing a water supply, installing slush tanks, a drilling contractor or properly constructing a slush pit will be necessary to ongoing drilling of a well which is to be continuously drilled to completion. As to the matter of the mouse hole or rat hole, I am convinced that they are not always necessary in the drilling process, a fact which Mr. Manocha agreed to under cross-examination. Securing lengths of required casing, cement, gel and equipment for pressure testing are similarly integral to the ongoing drilling. And of course, some sort of drilling rig is necessary.

In **Lang**, the Court held at page 264 that "some breaking of the ground" was required to constitute the commencement of a well. In the analysis of this case found in **Canadian Superior Oil**, at page 60, Stratton, J. of the Alberta Court of Queen's Bench moves to a more expansive definition of commencement of drilling. He reinterprets the findings in **Lang** as follows:

It is my view that the learned trial Judge in the Ontario decision, having in mind his comparison of the drilling situation to the construction of a building, did not intend his words to be limited to the actual act of breaking the ground as the result only of the rotary action of the drilling bit. His basic finding was that the terms of the lease imported that some work was contemplated upon and in the ground. Obviously, in the present situation, in preparing the Section 8 site for the "spudding in", substantial work was done on the site and the ground was broken by reason of this work.

In **Canadian Superior Oil** itself, the term the Court sought to define was *operations* which the *habendum* clause indicated included *drilling or operations incidental to drilling*. The Court held that the preparatory work was in keeping with the definition, although the drill bit had not broken ground. This is quite different from the *commencement of the well* required in **Lang**, so that the more expansive definition relied upon in **Canadian Superior Oil** reflects the more expansive activities outlined as acceptable in the top lease.

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The comment on **Lang** quoted from **Canadian Superior Oil** above also provides that while *commencing operations for or incidental to drilling* involves what can be termed the breaking of the surface in connection with such work, it indicates that the *spudding in* is more than mere preparatory work.

How then must the activities in **Oil City v. American Leduc**, where the operator prepared the surface and sank a 30 inch hole to a depth of 300 feet with a short piece of casing inside, having a water tank located nearby, be regarded. It is noted that the operator had difficulty in obtaining casing for the job. This activity was found by Clinton, J. and Ford, J.A. of the Alberta Supreme Court, Appellate Division at page 841 as being "preparation to drill, but not as the "commencement of drilling" as required under the agreement." It is noted that the agreement referred to required that the drilling of the well be commenced and that the well be continuously drilled. In the Alberta Supreme Court decision, the amount of drilling was not held to be sufficient to constitute commencement of drilling, which is echoed by Kellock, J. in the Supreme Court of Canada decision at page 578, where he states, "I

think that the small amount of drilling relied upon by the appellant company as an answer to the allegation of default against it in this respect ... is

not to be taken seriously as a compliance with its obligations under the provisions of para. 5."

On the face of it, this case appears to be baldly stating that what was done at the well site, namely the drilling of a 30 inch hole and installing 300 feet of casing was not sufficient. However, there are other circumstances mentioned, which include that there was no formal contract and that casing could not be obtained in time. What is not clear from the description of the case by the two Courts is whether the fact that the drilling rig had been removed [see commentary in J.B. Balem, **The Oil and Gas Lease in Canada**, 2nd ed. (Toronto: 1985, University of Toronto Press), p. 275] had an impact on the decision that drilling had not been commenced. While the Courts did recognize recognize the good faith of the operator/lessee in its pursuit of compliance, it was silent as to how this had an impact on intent to commence drilling at the time of the activity.

The facts in the case of **Wetter** are interesting because the drilling of the 300 foot hole was done without a permit, after the expiry of the lease. While preparations, such as surveying, payment of ground rental and bulldozing did take place prior to expiry, the rig which did actual drilling the week following expiry was subsequently removed. The Court considered that the work conducted up to the date of expiry did not constitute *commencement of drilling operations* **only after** having taken into account that which came later, namely that the actual drilling failed to demonstrate the requisite continuous drilling with a bona fide intent to drill to completion. This being the case, the Court did not seek to relieve the forfeiture of the lease, nor did it consider that the operations preliminary to drilling were such as to possibly constitute drilling operations without the actual drilling.

In **Wulff**, the activities of "raising capital, obtaining a lease of the surface rights, locating the well site and other operations incidental to the preparation for the actual commencement of drilling work" appear to have been undertaken (at pp. 453 and 454) to satisfy the *commencement of operations*. However, the meaning of *operations* was further clarified in an attachment to the lease, as set out on page 454:

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In the regulations respecting drilling attached to and forming part of the head lease, interpretation clause:

"'Operations' shall mean where the text so requires either drilling or production operations in connection with oil and gas wells."

As I understand the evidence, the efforts to obtain a lease of surface rights and locating a well site were made after May 1, 1938, and the incorporation of the company was on March 31, 1937, and a geological survey was made on May 8, 1937, both before the first extension agreement of May 31, 1937. If they constituted "operations" within the meaning of the agreement of February 18, 1937, there was no necessity of any extension. It seems clear that by the terms of both extension agreements the parties admitted the default, and by the terms they used made it clear that the "operations" in question were meant to be drilling operations.

In **Risvold** the Court considers the meaning of *to begin actional drilling operations*, as well as *spud in*. The Court states at pages 242 and 243:

The words "commence drilling operations" have been construed in various Courts in the United States and whilst there are some differences of opinion the general rule is summed up by Summers in his work on Oil and Gas at p. 362, as follows: -

"Where the lessee covenants to begin or commence a well or drilling operations within a certain definite time, and his failure to do so places him under a liability to have the lease forfeited, or a duty to pay delay rental, it becomes necessary to determine what act or acts of the lessor will satisfy this requirement. The general rule seems to be that actual drilling is unnecessary, but that the location of wells, hauling lumber on the premises, erection of derricks, providing a water supply, moving machinery on the premises and similar acts preliminary to the beginning of the actual work of drilling, when performed with the bona fide intention to proceed thereafter with diligence toward the completion of the well, constitute a commencement of beginning of a well or drilling operations within the meaning of this clause of the lease. If the lessee has performed such acts within the time limited, and has thereafter actually proceeded with the drilling to completion of a well, the intent with which he did the preliminary acts are unquestionable, and the court may rule as a matter of law that the well was commenced within the time specified by the lease."

In Thornton's Law of Oil and Gas, 4th ed., vol. 1, p. 299, it is said: - "Where a lessee selected the site of the well to be drilled, and hauled derrick timbers thereto, and selected and provided water for drilling purposes, it was held that there was a 'beginning of operations for the drilling of a well for oil."

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It will be noted that Summers in the excerpt above quoted refers to a "bona fide intention to proceed thereafter." In this case there can be no doubt on the evidence as to the good faith of the defendant company. Those connected with the enterprise may have miscalculated the time required to incorporate a company and raise the necessary money and they may have misjudged the time which would elapse before they could obtain the necessary equipment, but their *bona fide* intention to proceed at all times seems apparent.

Considerable evidence was given as to the term "spud in." This is a well known term in oil fields and means penetrating the surface of the soil with the drill in place. There seems to be some force in the argument that if the parties had so intended they would have used the well known term which designates that operation. On the whole I am inclined to agree with Mr. Davis as to the meaning of the words, "commence drilling operations," and with the view that the rule stated by Summers above set out is applicable to the facts of this case and to the language used, I therefore hold that the defendant company did not commit a breach of the agreement.

Through this analysis of the Court, it would appear that while to *spud in* would indeed require some use of the drill, drilling operations do not so require so long as there is *bona fide* intent regarding the ultimate objective of drilling.

I have considered that the meaning of this phrase "penetrate the surface of the soil" as used in **Risvold** may have a more ambiguous meaning than has been alluded to at the hearing. Mr. Manocha gave evidence that to spud a well with a cable tool rig would require drilling to a depth of 300 feet. Mr. Mitchell, in his evidence stated that, had everything been in order with his rotary tool rig, in one day or slightly more, he could have reached the depth of the switch over to the cable tool rig. Although Mr. Mitchell did not state this directly in his evidence, this depth is noted from the drilling plan as being approximately 88 metres or 290 feet. It is noted that he also stated that it would take approximately one week to ten days to reach a depth of 600 feet.

The question which this raises is whether there is some special meaning to the word, "surface" that is to mean something other than the uppermost layer, or four to six feet. In other words, can the surface be taken to mean the surface layer of the earth before bedrock is encountered, whether that be a depth of a few or a few hundred feet. I have considered that this is one possible meaning of the phrase as used in **Risvold**. As to whether it can be ascribed to the meaning of *spudding* as used in the regulation and defined in the Operating Standards is a possibility.

Although none of the cases submitted offers a definition of spudding similar to the one found in the Operating Standards, I was able to locate one American case which does provide a definition which does discuss depth of drilling. In **Flanigan v. Stern**, 1924, 265 S.W. 324, 204 Ky 814, Thomas, J. of the Court of Appeals of Kentucky states at page 325:

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On March 18, 1923, plaintiff entered into a contract with John P. Laffaty, a well driller, under the terms of which the latter agreed upon certain conditions to drill a well on the 82 acres, and about five days thereafter Laffaty moved his rig thereon and located the place to drill, and sunk his drill into the ground to a depth of from four to six feet, which sinking, according to the testimony in the record, is described and generally known in drilling operations as "spudding in," and is universally regarded as only a *gesture* towards drilling a well. It seems that, after going beyond the depth of a "spud in," it is necessary to have casing, and that no substantial progress can be made without it. On or about the day the "spud in" was made, plaintiff received a telegram from New York City informing him of the death of his father, and he

immediately went there and did not return to Bowling Green or to Kentucky until about September 1st, a space of nearly six months. ...

It is the insistence of his [the plaintiff's] counsel that the "spudding in" of the well was a *commencement* of a well within the meaning of the lease contract, and that the lease was thereby kept alive, and that Bryant had no right to treat it as forfeited thereafter, and to release the premises to Flanigan, which contention, if true, as it will be observed, takes no cognizance of the duty of the lessee under such obligations, to prosecute the drilling with reasonable diligence in order to preserve his rights. We have frequently held, following the general rule upon the subject, that in oil leases, because of the fugitive nature of the substance to be extracted, time is of the essence of the contract, and by analogy, that it is the duty of the lessee under such contract to begin the performance of his obligations as to the drilling within the time agreed upon and prosecute the work with reasonable diligence. ...

The agreement between the parties in **Flanigan** required that the well be commenced, the exact words being, "if no well be commenced on the said land on or before ..., this lease shall terminate ...".

The case stands for four principles. The first is that the spudding is a mere gesture towards commencement of drilling. The second mirrors Mr. Hunter's opinion evidence that breaking the top of the soil with the drill constitutes spudding, even absent the driving of casing. The third is that the commencement of the drilling was held to be something more than the mere spudding in of the well. The fourth is that the demonstrated intent of the parties will impact on the finding regarding the test. In this case, the plaintiff allowed the driller's rig to remain on site for 33 days, but having failed to advance additional funds, the driller moved on. This unwillingness or inability to pay for continued drilling to completion was instrumental in influencing the Court that the well had not been commenced.

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I find that to spud, as defined by the Operating Standards encompasses the case law dealing with spudding and commencement of a well. There is, however, a difference noted between the start of drilling of a well and the start of drilling operations. Operations encompasses preparation work and while the cases indicate that breaking of the soil may not be required to meet requirements for drilling operations, I find that the definition upon which I am ruling does require breaking of the soil. With the use of the word spudding in the Regulation, I find that there must be some actual drilling of the well, that is breaking of the soil with the drill. It is noted that "well" is defined in the **Act** as being:

"well" means a hole drilled into a geological formation of Cambrian or more recent age for the purpose of,

(a) oil or gas exploration or production,

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Drilling to a Specified Depth According to the Drilling Plan

Drilling to a specified depth according to the drilling plan most closely approximates the definition advanced by MNR. According to this position, it is the drilling plan and all information found in that plan which would be determinative.

Section 2 of the Regulation requires that all works undertaken by an operator shall comply with the Provincial Standards. Subsection (2) permits there to be deviation from the Standards, as long as it is reasonable in the circumstances, if steps are taken to prevent or limit damage to be equal to that established by the Standards and before departing from the Standards, notify MNR in writing. No mention is made in the subsection of the drilling plan.

The rules governing the application process are found in the Standards at page four. Item 1.3(b) provides that all applications must be accompanied by a drilling program which provides considerable detail, which is reproduced:

- (i) a geological prognosis of formation tops and expected oil, gas, water and loss of circulation zones and pressures;
- (ii) drilling rig type(s);
- (iii) the hole size, casing size, grade, weight for the entire length of the well;
- (iv) a well bore schematic diagram showing expected casing setting points, hole and casing size, how casing is set, water and hydrocarbon zones;
- (v) contact personnel and phone numbers;
- (vi) drilling procedures described in sequence;
- (vii) casing and cementing procedures including cement type, additives, volumes and tops;
- (viii) sample, coring, logging, testing and surveying programs;
- (ix) casing and formation integrity testing procedures;

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- (x) drilling fluids;
- (xi) proposed alternatives or contingencies to accomplish isolation of the required formations should the general program fail where specific ground or drilling conditions create problems e.g. lost circulation zones, aquifers, or other unusual conditions;

The position taken by MNR is that spudding may occur only if it is in total compliance with the drilling plan, by reason of which subsection 2(1) of the regulation requires that all works are to comply with the Provincial Standards. This drilling would need to be to a depth not specified in the Operating Standards, but owing to policy concerns. Therefore, if this position is accepted, the required

drilling must take place using the type of rig specified, the type of casing specified and to the depth indicated by Mr. Manocha under the circumstances of this case.

What is troubling about the position advanced by MNR is the depth of the required drilling. I have only the evidence of Mr. Manocha, that drilling be carried out to an unspecified depth using a cable tool rig, only that the depth be to bedrock. Even had the drilling been done with a rotary tool rig, the required depth remains obscure, although there is some indication that it should be to bedrock and cemented in.

Section 3 of the Standards is entitled, "Well Drilling" and commence with the words, "The following drilling standards apply to conventional rotary and cable tool drilling techniques." Looking over these requirements and comparing them with what was actually done by Metalore under the facts of this case, I make special note of the following:

- 1. All activities relating to the drill sump have either not been completed or not undertaken. Examples include the absence of temporary fencing and the impervious liner. Metalore has not complied with this Standard.
- 2. There was insufficient activity for concern regarding casing joints, as only one length of casing was used.
- 3. There are specific requirements for conductor casings to be drilled to bedrock. These do not appear to apply, as there was no indication of intention to drive the conductor casing to bedrock, some 290 or 300 feet in depth. Rather, the evidence appears to support the position that the conductor casing was to prevent the blow sand from sloughing into the hole, although the depth of this sand is unknown. However, there is evidence that a gravel zone was encountered at 18 feet.
- 4. Surface casing in cable tool drilled wells **should** be cemented to surface, or set in a casing shoe, if there is no water, hydrocarbon or brine evident in the hole below the conductor casing. Also, cementing is required across fresh water zones, but evidence is that none were encountered. Again, insufficient activity was undertaken to provide evidence of whether Metalore was intending to comply with this requirement, nor would it have been specified in the drilling plan, as the activity undertaken was not contemplated by the drilling plan. 40

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- 5. Many of the subsequent requirements refer to cementing practices, pressure integrity tests, sampling and monitoring, of intermediate and potential hydrocarbon bearing zones, none of which is applicable to this case.
- 6. Drilling and daily records are required to be kept. The drilling records refer to the casing particulars and history. The daily records must be kept at the well site, being quite detailed and specific as to what is entailed, during all drilling operations.

Metalore failed to ensure that its contractor, the numbered company owned by Dave Mitchell, complied with the requirement of available daily records. Indeed, the only thing Mr. Mitchell could produce in this regard was a doodle book with his observations in no specific order.

Given the considerable detail concerning the various technical requirements found in the Operating Standards, it would have been a small matter to include in the definition for spudding or elsewhere wording to cover the ambiguous depths advanced by Mr. Manocha. There can be found in the Operating Standard particulars on preparation, on the manner in which cementing, testing and drilling itself with either type of equipment are to be conducted. The definition of "spud" could have easily been included either in the Operating Standards, or in subsection 3(2) of the Regulation with words to the effect that spudding must take place to certain parameters which are clearly spelled out in great detail in the definition. If what is to constitute spudding is a policy concern, as advanced by Mr. Manocha, then the policy should be unambiguously spelled out so that there is no doubt what is involved. Mr. Manocha's policy concerns could readily be incorporated into the governing Operating Standards. Indeed, the definition could have gone so far as to include the requisite drilling depth specifically required for the type of drilling rig used, be it cable tool rig or rotary rig.

Time of Expiry and Intent

I note that the Courts have largely looked to all of the activities surrounding the operations to determine whether the lease had been complied with, with a view to determining intent. One item which is most troubling in this analysis is the fact that this has included activities which took place after the expiry of the lease. Such considerations as to whether the drilling rig was removed and whether drilling was undertaken with due diligence toward the completion of the well were looked at by the Courts and held determinative, notwithstanding that such activities took place after expiry.

As can be seen from the discussion of issues in the cases discussed above, the role or intent of the operator has been held to be determinative in most of the cases. The fact that the drilling rig had been removed, however, does appear to have an impact on intent. Depths appear to vary (from four to 300 feet). However, the one constant is the demonstrated intent of the operator. For example, where there are no funds available for 33 days to continue drilling, so that the rig is moved off site, the drilling was found not to have commenced, even where it had gone down to a depth of 300 feet and a casing had been installed.

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In the facts involving Metalore, the opportunity to determine the intent after midnight December 17, 1997 was impeded as the licence was declared by MNR to have expired. Whatever other acts by Metalore, it certainly did not seek to continue drilling without having the issue of the licence determined. On December 18th, virtually immediately, the licence was declared to have expired.

Given the interpretation of the provisions of the leases by the Courts is troubling in that the expiry of a lease is to be determined on a given date, and yet these after occurring activities were held to be determinative as to intent and therefore validity. Given that MNR sought to make a determination of the status of the licence at midnight December 17th, it did not avail itself of any of the Court sanctioned indicators of intent, perhaps the most important determinative factor, which I have no choice but to adopt.

I find that MNR failed to consult with Metalore to determine what had actually taken place, to the extent that MNR was unaware that a cable tool rig had been at the well site. It failed to make sufficient inquiries to determine whether the activity which took place constituted actual drilling, clearly a requirement of spudding, as defined by the Operating Standards and further clarified by the case law. MNR further took the position that Metalore's activities were required to be halted, pending the application for and issuance of a new licence, which robbed Metalore of the opportunity to demonstrate whether there was bona fide intent to drill to completion of the Metalore #89 Well.

As to the statements of Mr. Steele that it is not the practice of MNR to consult with operators on matters of compliance, this can be seen to be unfortunate only after the fact. It is through the drafting of the Regulation and the importation of the Operating Standards definition of spudding, which is further clarified through the case law, which is found to require knowledge of intent. This intent can be determined only through what actually took place, and more unfortunately on the facts of this case, what was to have taken place, but for the cancellation of the licence.

Intent of Metalore

There are clear indications from the evidence of witnesses on behalf of Metalore as to what it had actually done and what was intended. Had everything been done according to the plans in place at the end of November, 1997, spudding to the satisfaction of MNR would have taken place prior to midnight, December 17, 1997, being performed by Dave Mitchell's company, using his rotary rig. However, matters were not that simple.

Despite the confounding circumstances, I have had the opportunity to observe Messrs. Chilian and Mitchell in the giving of their evidence and find as follows. The rotary rig owned by Mr. Mitchell's numbered company was not available as previously had been counted on, due to the need to tool certain fittings which arrived late from Oklahoma. This caused certain delays which precipitated an alternative approach by Mr. Chilian and Metalore. Without advance thought to the specific details of his drilling plan, Mr. Chilian acceded to Mr. Mitchell's proposal to have the drill bit of the cable tool rig come into contact with the surface of the soil and

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commence the drilling of the hole into which eventually would be sunk the casing set out in the drilling program. That the 13 1/2 inch casing was used might be coincidence or fortuitous, for it appears to have been necessary under prevailing conditions on the ground, namely the existence of blow sand whose sloughing would create ongoing problems.

In his attempt to save the licence, I find that Dave Mitchell caused a small hole to be drilled into the ground at the survey stake by a cable tool rig. The Operating Standards, while not defining drilling, do offer definitions for both cable tool drilling and rotary drilling:

Cable Tool Drilling - a method of drilling where a heavy metal bit is repeatedly raised and dropped to fracture rock by percussion, thereby drilling a well.

Rotary Drilling - drilling a borehole for a well with a drill bit attached to joints of hollow drill pipe which are rotated to accomplish penetration of rock formations.

I find that actual drilling did take place, through the use of the cable tool rig. The drilling did not take place in accordance with the drilling plan, nor was the approval of the inspector sought, but it was nonetheless a means of ensuring that the ground was broken with the drill in place by the relevant date.

The indications of subsequent intent are Mr. Chilian's ongoing conversations with Mr. Steele and correspondence with MNR. I find that it was his intent to resume drilling in short order, certainly with a delay of no more than two weeks, and as indicated in his letter to Ray Pichette of December 19, 1997 (Ex. 1, Tab 16), the rotary rig was then up and running and ready to go. There is no evidence at this point in time that Metalore did not have the necessary funds to proceed. The cheque for the initial work to Mr. Mitchell's company was cashed. The contract was in place for the remainder of the drilling. The only thing standing in Mr. Chilian's way was equipment failure, which he sought to rectify immediately and in the meantime made provisional arrangements to demonstrate his ongoing good faith and intent to drill.

Compliance and the Provincial Standards

Mr. Devereaux has advanced the position that contravention of the Operating Standards is a matter for enforcement, apart from the matter of what constitutes spudding. The position advanced by MNR is that compliance is integral to proceeding in accordance with practices sanctioned by the legislation.

If I accept Mr. Devereaux's reasoning, then I would be called upon to disregard the requirements of the **Act** and regulation, that no one can drill, except, not only with a licence, but **in accordance with a well licence**. The works and the licence, which includes a drilling plan, must be in accordance with the Provincial Standards. If the drilling which took place is not in accordance with the licence, can it not be said that no lawful drilling took place pursuant to a licence under the **Act**? Following with this reasoning, the only avenue open to an inspector, where

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Metalore is found to be in contravention of a provision of the **Act** or regulations, which by association must necessarily include the Standards, then he or she may proceed with an order and tagging of the work pursuant to section 7 of the **Act**, which essentially puts a stop to any ongoing activity.

I have considered the implications of this position and find that, notwithstanding issues of compliance, find that the merits of the case support the finding that Metalore spudded Metalore #89 Well. The intent to spud the well existed. As in the words used in **Risvold**, there is evidence of

miscalculation on the part of Metalore and circumstances conspired to frustrate its original intent to comply with the drilling plan. Its actions along with its demonstrated intent are sufficient to demonstrate that it was their intent to proceed at all times with the well.

As to the matter of preliminary operations, again, the matter is found to rest in determinations of compliance. The cuttings pit was not fully prepared, but from a practical standpoint, was not yet necessary, as cuttings would not be produced until the rotary rig was installed. Its construction is less important to the matter of the "breaking of the ground with the drill" than to "continuously drilling to completion".

As to the depth of the actual drilling which took place, I find that, while there may be some merit to MNR's position from a policy standpoint, that the extent of drilling which would be required is sufficiently ambiguous that it should be specifically spelled out in the Operating Standards. Of all of the cases I have read, I find the definition in **Flanigan v. Stern** to be the most apt - a mere gesture towards drilling a well. To this I would add that the drill must break the ground to constitute spudding, but whether with a rotary rig or a cable tool rig, I do not find that it should make any difference. I find that the activities which occurred on December 17, 1997 confined to the drilling of the 22 to 24 foot hole with the cable tool rig constituted this gesture towards starting to drill the well. The installation of the 13 1/2 inch conductor casing, in my opinion, is irrelevant, as it is the drilling and not the conductor which governs. The most important aspect of determining that the minimal drilling which took place constitutes spudding in its efforts to start drilling the well rests with the finding that there was intent at all times on the part of Metalore to continuously drill thereafter to completion, allowing for a brief suspension owing to the repairs required to the rig.

Mr. Chilian strikes me as a man who is driven to achieve, notwithstanding his excellent record of past successes in his chosen fields. I suspect that he does not suffer over regulation gladly. However, I must say that the way that the Regulation and Operating Standards must be interpreted, given the case law, may have confused MNR in its methods of operation or implementation of oversight of works. The drafting of subsection 3(2) clearly gives the impression that the licence can and will expire on an anniversary date. However, through making the Provincial Standards apply, defining spudding in the Operating Standards and through the case law, which has the appearance of being a simple stop-watch determination, has had the reverse result. The interpretation is certainly more complex and subtle. It can be understood why the inspector and others on behalf of MNR would be unaware of the complexities which govern determinations of this issue, as expiry and midnight have the initial appearance of being determinative. However, intent which can be demonstrated after the fact is found to be determinative.

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Conclusions

While the conclusions I have reached have not been made without significant thought and effort, I accept Mr. Hunter's definitions of "spud", "spud in" and "spud date" at Tabs 4, 5 and 7 of Exhibit 1, as modified by my findings with respect to the meaning of "start drilling a well" and the overriding importance of intent. I further conclude that every attempt had been made by Metalore to spud Well Metalore #89 and that Well Metalore #89 had, in fact, been spudded on December 17, 1997.

Consequently, I will order that the appeal by Metalore Resources Limited from the decision of the Inspector, dated the 18th day of December, 1997, regarding Well Permit 8470 for the Well Metalore #89, North Walsingham, 7-22-VII be granted. As a result Well Permit 8470 continues to be in effect. Metalore, however, should be aware that this decision is in large part based upon demonstration of its intent to drill this well continuously to completion. Any evidence that this is not done will undoubtedly result in further intervention by MNR and bring my findings as to intent into question.

At the conclusion of the hearing on December 22, 1998, Metalore Resources Limited reserved the right to make submissions concerning costs in the event that they were successful in their appeal. I admit, I do have doubts as to whether there is jurisdiction, given that I act as a hearing officer under the **Act** and not in the capacity of Mining and Lands Commissioner appointed under the **Ministry of Natural Resources Act**. There and in other legislation, Part VI of the **Mining Act** does give jurisdiction to consider the matter of costs, but those provisions do not operate here.

I also feel that Metalore should be aware that if I find that I have jurisdiction to hear submissions on costs, I would be asking for submissions as to how potential non-compliance with Provincial Standards should be seen to affect the awarding of costs or the quantum assessed, if any.