STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:

RECEIVED
MAR 15 2004
Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

APPLICATION OF EGL RESOURCES, INC. AND ROBERT LANDRETH FOR POOL EXTENSION FOR THE NORTH BELL LAKE-DEVONIAN GAS POOL, OR ALTERNATIVELY, FOR POOL CREATION AND SPECIAL POOL RULES, AND EXPANSION OF GAS SPACING AND PRORATION UNIT LEA COUNTY, NEW MEXICO.

CASE NO. 13085
ORDER NO. R-12106
DE NOVO

RESPONSE OF EGL RESOURCES, INC. AND ROBERT LANDRETH TO THE JOINT OBJECTIONS OF DEVON ENERGY PRODUCTION COMPANY, L.P. AND SOUTHWESTERN ENERGY PRODUCTION COMPANY TO SUBPOENA DATED MARCH 2, 2004

EGL Resources, Inc. and Robert Landreth through their counsel, Miller Stratvert P.A., for their response to the joint objections to subpoenas filed by Devon Energy Production Company, L.P. and Southwestern Energy Production Company, state:

SUMMARY

Devon and Southwestern resist the production of service company analysis of drill stem test data for the reasons that (1) its production is burdensome, (2) it is not

relevant, and (3) it constitutes a trade secret. The Commission should reject the objections for the following reasons:

1. Devon/Southwestern's objection of burden was wholly unsubstantiated and not seriously made.

2. The materials sought are clearly relevant and their production is in accord with the past practices of the Division and Commission.

3. Devon and Southwestern have not established that the materials sought constitute a trade secret.

POINTS AND AUTHORITIES

1. The undue burden objection.

By subpoena duces tecum issued by the Division Director and Commission Chairman on March 2, 2004 at the request of EGL Resources, Inc. and Robert Landreth, Devon Energy Production Company, L.P. was directed to produce at the offices of the Division on March 12, 2004, *inter alia*, the following: "*3. All DST reports, including pressure charts, fluid recovery data and observed flow rates, together with service company analysis thereof with respect to reservoir parameters.*" On March 11, 2004, late in the day, counsel for Devon and Southwestern filed their joint response to this subpoena item with respect to the material sought under subpoena item 3. The full extent of the Devon/Southwestern objection was to state as follows: "*Response: Will produce only the raw field report available to Devon. Devon has no duty or obligation to do EGL/Landreth's homework.*"

In stating their objection, Devon and Southwestern did not seek to invoke any privilege. Neither did they claim that the subpoena sought confidential or proprietary business data or trade secret information. On its face, then, it is apparent that the full scope of the Devon/Southwestern objection is made on the claim that the subpoena request is burdensome. It was only at the hearing on the objections that Devon and Southwestern switched horses and made the claim that the subpoena request was objectionable, but only to the extent it sought "service company analysis" of drill stem test data. From the arguments made at the hearing, we now understand that Devon seeks to avoid its obligation to obey the subpoena for the reason that the request for service company analysis would lead to disclosure of proprietary business information or trade secrets.

Although they are under no duty or obligation to do so, it now appears that EGL/Landreth must do Devon's homework for it so that it can become fully informed of its duties to comply with this Agency's discovery processes.

2. The materials sought are clearly relevant.

In the past, the Division and Commission have applied a broadest relevance standard in the adjudication of discovery disputes. The law favors liberal discovery in any proceeding. Carter v. Burns Constr. Co., 85 N.M. 27, 31, 508 P.2d 1324, 1328 (Ct. App. 1973); cert denied, 85 N.M. 5, 508 P.2d 1302 (1973). The applicable relevance standard in discovery is also broadly construed. Smith v. MCI Telecommunications Corp., 137 F.R.D. 454, 463 (S.D.N.Y.) The DST data and analysis evidence sought by the EGL/Landreth pursuant to their subpoena is clearly "pertinent" evidence within the

meaning of NMSA 1978 § 70-2-8 that will no doubt play a significant role in the Commission's *de novo* review of this case.

In this case, the parties do not dispute that the Devonian reservoir at issue has a very active water-drive mechanism which renders a proper analysis of reservoir characteristics particularly problematic. The availability of information and analyses in any way probative of the presence, location, and source of water encountered during drilling and completion will be crucial to the Commission's understanding of the producing characteristics of the reservoir and the propriety of development on 320-acres versus 640-acres. Devon made this very point quite succinctly at the October 2, 2003 Examiner hearing. Devon said: "Petroleum industry opinion and research shows that predicting ultimate gas recovery from water drive gas reservoirs is one of the most complicated processes in petroleum engineering...Knowing and understanding the aquifer will assist with understanding the gas reservoir and aid in OGIP calculations." (See Devon Exhibit 17 excerpt attached as Exhibit A).

The service company analysis of the DST data sought under the subpoena would necessarily include water analysis from fluid recovery data obtained from the Devonian formation. The data and analysis are useful in determining whether, among other things, the water encountered in the Devonian is formation water rather than drilling fluids. The DST analysis and data would also include observed flow rates and choke-sizes, flowing and shut-in surface pressures, and bottom-hole pressures, all of which are relevant to the question of the drainage capability of the wells currently completed[1] in the reservoir.

During the October 2, 2003 Examiner hearing, EGL/Landreth did not hesitate to present to the Examiner the DST analysis from its Rio Blanco "4" No. 1 well. (See

EGL/Landreth Exhibit No. 9, attached hereto as Exhibit B). It is patently disingenuous then for Devon and Southwestern to refuse to produce their own data and analysis when the matters at issue in this de novo proceeding are exactly the same.

Administrative proceedings must conform to fundamental principles of justice and the requirements of due process of law. See Yadon v. Quinoco Petro., Inc., 114 N.M. 808, 845 P.2d 1262. (Ct. App. 1992) (Donnely, J. dissenting) (citing Uhden v. New Mexico Oil Conservation Comm'n, 112 N.M. 528, 530, 817, P.2d 721, 723 (1991).) Where administrative proceedings deprive a party of a fair and full hearing, with opportunity to cross-examine witnesses, inspect documents, offer evidence in explanation or rebuttal, and to be fully apprised of evidence, **there is no hearing**. Id. (citing Transcontinental Bus Sys., Inc. v. State Corp. Comm'n, 56 N.M. 158, 179, 241 P.2d 829, 842 (1952) (emphasis added). Without the ability to inspect the documents subpoenaed, EGL and Landreth will be deprived of the full and fair hearing which they are entitled under the law. See Transcontinental Bus Sys., Inc. v. State Corp.Comm'n supra.

This *de novo* proceeding under NMSA 1978 Section 70-2-13 is the final opportunity afforded the parties to establish a record in the event of further appeals. See Viking Petroleum, Inc. v. Oil Conservation Comm'n, 100 N.M. 451, 453, 672 P.2d 280, 282 (1983) (appellate court's review is limited to the evidence presented to the Commission, and the administrative findings by the Commission should be sufficiently extensive to show the basis of the order.) Accordingly; absent full and complete compliance with the subpoenas, EGL/Landreth will be unable to make a complete presentation of relevant evidence to the Commission and due process will be disserved as a result. The Commission should enforce the subpoena to accord a full and fair hearing

[1] We have confirmed that the Devon well in Section 33 is now producing into the pipeline.

in accordance with the fundamental principals of due process guaranteed by both the New Mexico and United States Constitutions.

1. The trade secret objection.

Privileges in New Mexico are recognized only as provided for in the New Mexico Constitution and the rules adopted by the New Mexico Supreme Court, and except as therein provided, no person has the privilege to refuse to disclose any matter, refuse to be a witness or refuse to produce any object or writing. Rule 11-501 NMRA 2004; Public Service Company of New Mexico v. John Lyons, 2000-NMCA-077, ¶11, 129 N.M. 487, 491, 10 P.3d 166, 170. New Mexico Courts (and administrative tribunals) "are bound by the privileges expressly stated in Rule 11-502 NMRA 2000 (required reports privileged by statute), Rule 11-503 NMRA 2000 (attorney-client privilege), Rule 11-504 NMRA 2000 (physician-patient and psychotherapist-patient privilege), Rule 11-505 NMRA 2000 (husband-wife privileges), Rule 11-506 NMRA 2000 (communications to clergy), Rule 11-507 NMRA 2000 (political vote), Rule 11-508 NMRA 2000 (trade secrets), Rule 11-509 NMRA 2000 (communications to juvenile probation officers and social service workers), Rule 11-510 NMRA 2000 (identity of informer), and Rule 11-514 NMRA 2000 (news media)." *Id.* at ¶ 13.

Under Rule 11-508 NMRA 2004 (Trade Secrets), a person has a privilege to refuse to disclose and to prevent others from disclosing a trade secret owned by the person, but only if assertion of the privilege will not tend to conceal fraud or otherwise work injustice. If the assertion of the privilege would otherwise work an injustice, then the Court should order disclosure of the material while taking such protective measures as the interests of the privilege-holder and the furtherance of justice may require. *Id.*

Further, the privilege is waived if the holder of the privilege has voluntarily disclosed any significant part of the matter to anyone under circumstances where the disclosure is not privileged. Rule 11-511 NMRA 2004. Presumably, Devon has shared its service company analysis with Southwestern, if not others. Moreover, in their memorandum, Devon and Southwestern have obviously made only a "cut and paste" effort to equate drill stem test data analysis with seismic data. They make no real demonstration that the DST analysis sought here qualifies as a "trade secret".

In the industry, DST data and analysis are accorded entirely different treatment from that given to seismic data. DST data are well-specific and do not cover broad areas of acreage as do typical seismic evaluations. Moreover, DST data and analysis are not subject to the onerous restrictions that typically apply under seismic data licenses and permits.

This Agency has historically utilized a relevance standard in determining whether materials subpoenaed should be produced and it has rejected objections based on the proprietary or confidential nature of the materials, even in those cases where seismic data are sought. (See May 22, 1998 letter decision in NMOCC Case No. 11724 (*de novo*); Application of Gillespie Crow, Inc., Exhibit C, attached; See, also the Commission's Motion to Dismiss and Reply in *EEX Corporation vs. Oil Conservation Commission*, Exhibits D and E.)

Here, by law, the Commission is obliged to make findings of ultimate facts materials to the issues before it. Further the Commission's findings are required to have substantial support in the record and must also disclose the reasoning of the Commission. See Fasken v. Oil Conservation Comm'n., 87 N.M. 292, 532 P.2d 588 (1975). This the

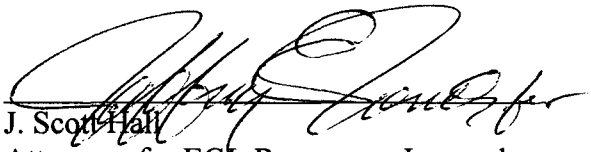
Commission cannot do without receiving evidence from the materials to be produced pursuant to the subpoena. This *de novo* proceeding under Section 70-2-13 is the final opportunity afforded the parties to establish a record in the event of further appeals. Accordingly, absent full and complete compliance with the subpoena it is not likely that the parties will be able to make a complete presentation of relevant evidence to the Commission and due process will be disserved as a result. This is the very form of injustice that the law instructs adjudicators to avoid when resolving objections based on an assertion of a privilege.

CONCLUSION

For all the foregoing reasons, the Commission should order Devon's compliance with the March 2, 2004 Subpoena Duces Tecum.

Respectfully submitted,

MILLER STRATVERT P.A.

By: 

J. Scott Hall
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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was hand-delivered to counsel of record on the 15th day of March 2004 as follows:

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J. Scott Hall

DEVON EXHIBIT

Petroleum industry opinion and research shows that predicting ultimate gas recovery from water drive gas reservoirs is one of the most complicated processes in petroleum engineering.

The following Society of Petroleum Engineers (SPE) technical papers and other citations support this fact.

They point out that not only is reservoir data important for the gas saturated portion of the reservoir, but also for the aquifer. Having wells drilled deep enough into the aquifer is required.

Devon is designing its wells to penetrate the aquifer and test for the presence of a GWC.....EGL/Landreth is not, and will not obtain any data related to confirm the existence of a GWC.

The technical papers mention that water production traps gas in place, lowers ultimate recovery and causes operational issues.

They point out that, gas recovery can be increased in water drive gas reservoirs, such as the Devonian, with multiple wells.

SPE Paper Number	Title	Excerpt	Observation
	Petroleum Engineering Handbook, Copyright 1987 - Recoveries from Gas Reservoirs with Water Drive	Because the portion of the reservoir that will be ultimately invaded by water is not always predictable, and because the amount of gas that may be bypassed by the water is difficult to estimate, the recovery from gas reservoirs with water drive is usually estimated by applying a recovery factor	
		Because gas is trapped and bypassed by the advancing water and because of the associated water production problems, recovery factors are significantly lower for gas reservoirs with water drive. Typical factors range from 50 - 70% for water drive gas reservoirs as compared with 70-90% for expansion-drive reservoirs.	Ultimate recovery of OGIP ranges from 50-70% for water drive gas reservoirs.
5669	Future Performance Prediction for Water Drive Gas Reservoirs	"Water influx is not independent but is rather a function of both the reservoir and the aquifer flow properties. A proper prediction model should include the inter-relationship between the aquifer and the reservoir"	Knowing and understanding the aquifer will assist with understanding the gas reservoir and aid in OGIP calculations
39867	Reservoir characterization Methodology to Identify Reserve Growth Potential	There are some additional reserve growth concepts applicable in water-drive gas reservoirs because encroaching water traps gas.	Multiple wells are required to drain water-drive gas reservoirs.
35613	Production Enhancement Strategies for Strong Bottom Water Drive Reservoirs	Severe water coning occurs when producing oil and gas from a strong bottom water drive reservoir	Multiple wells mitigate or can reduce water coning issues
		For a strong bottom water drive reservoir, bottom water is destined to be produced and there is no so-called critical rate associated with any completion method	Multiple wells mitigate or can reduce water coning issues

4635 Effects of Permeability Variation and Production Rate on Recovery from Partial Water Drive Gas Reservoirs	Higher gas recovery efficiencies generally are achieved by pressure depletion than by water displacement, and it would seem desirable to reduce reservoir abandonment pressure to as low as operationally feasible	Multiple wells will lower reservoir pressure quicker, which enhances ultimate gas recovery
6830 Beaver River Middle Devonian Carbonate: Performance Review of a High Relief, Fractured Gas Reservoir with Water Drive	After production began in 1971, a severe decrease in recoverable reserves and deliverability resulted from water influx	Water drive affects ultimate recovery, multiple wells can mitigate premature abandonment
	The main production at Beaver River is from a thick sequence of highly altered dolomites	Similar to the Devonian in New Mexico
	Heterogeneities have been superimposed on the this sequence by a high degree of delagenesis and tectonic alteration	Similar to the Devonian in New Mexico
	We concluded that the matrix rock might be described best as a two-porosity system – that is the matrix porosity (probably 2% or less) and fracture-vug porosity (0%-6% or greater)	Similar to the Devonian in New Mexico, no one knows the "true" porosity
	Based on earlier porosity measurements, this would indicate a high trapped-gas saturation in the blind vugs, dead-end fractures, and matrix	Gas is left in place, Ultimate Recovery is compromised due to heterogeneities.
	This depletion mechanism resulted in substantial loss of reserves throughout the reservoir by trapping high-pressure gas in dead-end fractures and vugs and in the matrix	Water drive leaves gas is left in place, Ultimate Recovery is compromised due to heterogeneities.
64402 Monitoring and Control of Water Influx in Strong Aquifer Drive Gas Field Offshore Sarawak	The M3 and M1 gas fields offshore Sarawak exhibit aquifer support that is stronger than expected and markedly non-uniform in nature.	Heterogeneity causes non-uniform production trends and complicates recovery
	Initially, the aquifer rise was assumed to be uniform across these high permeability reservoirs. The aquifer rise is clearly non-uniform across the field	Without accurate, multi-well data, gross assumptions are always wrong. Multiple wells are required to define a reservoir and produce efficiently.
	The variation in GWC introduces additional uncertainty in modeling of OGIP and ultimate recovery	Multiple wells are required for more accurate OGIP calculations and efficient reservoir drainage
	The uneven water rise can be explained by contrasts in permeability. These different perms do not affect the gas pressure distribution. Indeed, gas pressures in the different wells were measured to differ by less than 10 psia. However, they do influence the water movement sufficient to result in substantial water level differences.	Perm differences cause varying water influx which trap gas and affect Ultimate recovery.

29808	Water Coning In Fractured Basement Reservoirs	Coned water increases the cost of production operations and reduces both the efficiency of depletion mechanisms and the recovery of reserves.	Multiple wells helps reduce water coning and increases ultimate recovery of gas.
77415	A Study of Water Coning Control in Oil Wells by Injected or Natural Flow Barriers Using Scaled Physical Model and Numerical Simulator	In bottom water drive reservoirs, the phenomenon of water coning can cause increased water production and shorten the life of the well	Multiple wells helps reduce water coning and increases ultimate recovery of gas.
11104	Enhanced Gas Recovery from Water Drive Reservoirs - Methods and Economics	One area requiring further industry attention for enhanced recovery is the reservoir associated with an active aquifer. In reservoirs of this type, pressure maintenance and entrapment of gas by encroaching water greatly reduce recovery	Multiple wells are required to drain the gas reserves in water drive reservoirs
		Where there is water encroachment, recovery may be as low as 10 percent of the original gas in place. The remaining reserves would be unrecoverable unless external aid is provided to reduce the water influx, and induce pressure depletion.	Multiple wells increase ultimate recovery, at times, multiple wells producing water with the gas assist with draining the aquifer and lowering BHP there-by increasing the ultimate gas recovery due to pressure depletion.
		The mechanisms by which the aquifer reduces gas recovery include:	
		(1) Dissolving of gas: The diffusion of gas into the encroaching water generally causes a slight loss of recoverable gas due to the ability of water to dissolve the gas. Gas solubility in water has been found to decrease with increasing temperature and to increase with pressure.	Gas is not miscible in water. Gas dissolves into the encroaching water. If the water is not produced via multiple wells, ultimate gas recovery is low.
		(2) Capillary Entrapment: As water invades the gas bearing reservoir, capillary effects cause water to move irregularly. Where the water path forms an enclosure around any gas bubble, such bubble becomes unrecoverable.	Multiple wells is one way to reduce the entrapment of gas. More wellbores allows for more flow paths of gas and/or water.
		(3) Pressure maintenance: It is well known that a gas reservoir derives most of its producing energy from the expansion of gas itself. Where water influx occurs, pressure reduction and therefore, gas expansion are restricted. In effect, at the time the reservoir is abandoned, the reservoir pressure may be too high to allow maximum recovery of the gas in place. Results of several investigations indicate that residual gas in a water invaded reservoir is dependent mainly on the strength of the aquifer, the original gas saturation, and the production rate. In general, the stronger the aquifer, the larger the residual gas.	Multiple wells allows for more efficient reduction of the reservoir pressure there-by increasing the ultimate recovery of gas.

12046 Nitrogen Injection into Water-Driven Natural Gas or Condensate Reservoirs Increases Recovery	Gas reservoirs may leave large amounts of hydrocarbon gas in place at abandonment if the reservoir is subject to depletion by a secondary recovery process involving either water injection or a natural water drive.	Reducing the reservoir pressure is one key to increased gas recovery from water drive reservoirs. Multiple wells allow for efficient lowering of reservoir pressure.
	Water displacing hydrocarbons is an immiscible process and the hydrocarbons are trapped by the process.	Multiple wells will reduce trapping of gas in the reservoir.
	Natural water drive may trap 20 to 45 percent of the original hydrocarbon gas in place.	Water drive reservoirs recovery natural gas inefficiently. Multiple wells allow for efficient and increased natural gas recovery.
13233 Effect of Aquifer Size on the Performance of Partial Waterdrive Gas Reservoirs	Predicting the advancement of a gas/water contact (GWC) in a waterdrive gas reservoir plays an important role in evaluating, forecasting and analyzing the reservoir performance. Several factors control the rise of the GWC. Some of the most important factors are the size of the aquifer, gas production rate, initial reservoir pressure, and formation permeability. These factors account for the abandonment of a number of gas reservoirs at extraordinarily high pressure.	Multiple wells penetrating the aquifer are required for proper prediction of gas reservoir performance and increasing ultimate recovery and preventing "waste" by leaving reserves in the ground.
	Agarwal et al, concluded that gas recovery depends on production rate, residual gas saturation, aquifer strength, aquifer permeability and the volumetric sweep efficiency of the encroaching water zone.	Gas recovery depends on many things. Multiple wells decreases the variability of these unknowns and increases ultimate gas recovery.
	In 1968, Knapp et al concluded that gas recovery is a function of gas production rate, aquifer strength and heterogeneity.	Multiple wells are required to mitigate heterogeneity.
	Geffen et al in 1952 indicated that residual gas saturation under water drive varies from 15 to 50% of pore space.	Low ultimate recovery is obtained in water-drive gas reservoirs. Multiple wells can increase the ultimate recovery and prevent "waste"
	Givens used a simulation model to determine the effects of well density, production rates, water influx, water coning and rock and fluid properties on the depletion performance of dry gas reservoirs with bottom water drive. He concluded that the presence of bottom water drive in gas reservoirs lowers the ultimate recovery and increases the producing life of the gas reservoirs.	Multiple wells will shorten the time required to recovery gas reserves. Present value will be enhanced, gas will not be "wasted" and left in the ground.
	Water production from the flooded wells might help reduce the activity of the aquifer and consequently might increase gas recovery.	Multiple wells increase recovery. Producing water can increase ultimate gas recovery. This can not be accomplished with single wells by themselves.

59781	New Approach for Simultaneous Determination of the OGIP and Aquifer Performance with No Prior Knowledge of Aquifer Properties and Geometry	Should an encroaching aquifer support the reservoir pressure as production advances, an independent mathematical model is required to describe the behavior of the aquifer-reservoir system.	Multiple wells are required to gather data for modeling and validate its results.
		It ought to be appreciated that there are more uncertainties attached to the subject of aquifer fitting than to any other in reservoir engineering	Multiple wells drilled into the aquifer are the only means for obtaining an accurate overall picture of a water drive gas reservoir
		Even more uncertain, though, is the geometry and areal continuity of the aquifer itself.	Multiple wells drilled into the aquifer are the only means for obtaining an accurate overall picture of a water drive gas reservoir

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TEST DATE: 10-Sep-03

STAR

CASE 4: REVISED 30 SEPT 2003

Schlumberger Transient Analysis Report

Based on Model Verified Interpretation Of Schlumberger Well Test Data

Schlumberger

COMPANY : EGL RESOURCES		WELL: RIO BLANCO 4 FED #1	
TEST IDENTIFICATION		**WELL LOCATION**	
Test Type	DST	Field	NORTH BELL LAKE
Test No.	ONE	County	LEA
Formation	DEVONIAN	State	NEW MEXICO
Test Interval (ft)	14,488-14,590	Location	
SAMPLE CHAMBER DATA		**TEST STRING CONFIGURATION**	
Recovered Gas (c.f.)	N/A	Open Hole Size (in)	4.125
Recovered Oil (c.c.)	N/A	Gauge Depth (ft)	14,351
Recovered Water (c.c.)	N/A	DC Length (ft)/I.D. (in)	439/1.5
Recovered Mud (c.c.)	N/A	DP Length Size (in)	9,683/2.764
Sample Chamber Pressure (psig)	N/A	DP Length Size (in)	4,198/2.323
Rec. Mud Filtrate	NOT REPORTED	**TEST CONDITIONS**	
Rec. Water Filtrate	N/A	Tbg / Wellhead Pressure (psi)	
Oil API Gravity	56.2 @ 60 deg F		
INTERPRETATION RESULTS		**ROCK / FLUID / WELLBORE PROPERTIES**	
Model of Behavior	DUAL POROSITY	Gas Gravity (Deg API)	0.602
Fluid Type Used for Analysis	GAS	Viscosity (cp)	0.0264
Ext. Reservoir Pressure (psi)	6,139 @ GAUGE	Total Compressibility (1/psi)	7.51E-05
Transmissibility (md.ft/cp)	24,676	Porosity (%)	5.1
Permeability (md)	17.6	Reservoir Temperature (F)	212
Skin	83.3	Water Saturation (%)	20
Pressure Drop Skin (psi)	1,156	Net Pay (ft) (Case 1)	40
Radius of Investigation (ft)	270		
Omega	0.14		
Lambda	3.01E-05		

PRODUCTION RATE DURING TEST: 4,000 MSCF/D (Operator Reported)

SUMMARY:

This report contains the analysis of the data acquired during a Drill Stem Test of the Devonian zone conducted on the EGL Resources Rio Blanco 4 Fed #1 well in Lea County, New Mexico. This test was performed by Schlumberger's Hobbs New Mexico Testing District (505 393 4107). The zone was isolated from 14,488 feet to 14,590 feet with drill stem test tools and the data was acquired using tandem electronic pressure gauges.

The data was modeled using a two porosity reservoir model with changing wellbore storage and skin. Both semi log and log log type curve matching techniques were used to interpret this data. Agreement between parameters calculated using both methods was excellent. The permeability was calculated to be 17.6 md, using a thickness of 40 feet. The skin was calculated to be 83.3 causing a near wellbore pressure drop of 1,156 psi. The reservoir pressure was extrapolated from the type curve to be 6,139 psi, at gauge depth.

For further discussion of this analysis, please refer to the interpretation discussion on page two of this report. If you have any questions, please call Marc Pearcy or Angie Fenton at 405 840 2781.

EXHIBIT B

NMOCD CASE NO. 13085
OCTOBER 2, 2003
EGL/LANDRETH EXHIBIT NO. 9

ANALYSIS DISCUSSION

Schlumberger

EGL Resources Rio Blanco 4 Fed #1 Interpretation Discussion:

This report contains the analysis of the data acquired during a Drill Stem Test of the Devonian zone conducted on the EGL Resources Rio Blanco 4 Fed #1 well in Lea County, New Mexico. This test was performed by Schlumberger's Hobbs New Mexico Testing District (505 393 4107).

The data was taken using slickline conveyed, electronic pressure gauges. The zone was isolated from 14,488 feet to 14,590 feet with drill stem test tools and a standard drill stem test procedure was followed consisting of two flow periods and two shut in periods.

The data was modeled using a two porosity reservoir model with changing wellbore storage and skin. A two porosity model assumes the reservoir consists of two permeability systems, one with of much greater permeability than the other. The fluid is stored in the lower permeability matrix system and flows through the higher permeability to the wellbore.

The radial flow regime was reached after approximately 6 minutes of build up time and continued for approximately 0.5 hours. The radial flow regime is indicated by the constant pressure derivative on the plot of log-log pressure and pressure derivative versus shut in time (using the psuedopressure function). Since data during the radial flow regime was acquired, both semi log and log log type curve matching techniques were used to interpret this data. Agreement between parameters calculated using both methods was excellent. A comparison of these results is presented in the table below.

	Permeability	Skin	Res. Pressure
Semi Log	17.9 md	84.5	6,137 psi
Log Log	17.6 md	83.3	6,139 psi

Due to the higher permeability system being the primary conduit to the wellbore, a two porosity reservoir in it's natural state, has a skin of negative 3.5. The skin calculated from this analysis would then indicate a highly damaged wellbore.

Deviation from the model after 0.5 hours of buildup is likely caused by changing wellbore storage and phase behavior in the wellbore. This behavior is impossible to predict and difficult to model, however it does not affect the validity of this interpretation.

In order to validate the results of this analysis, a simulation of the test sequence was made using the model constructed from this interpretation. The measured data was then plotted on the same scale as the simulated data. Agreement between the measured data and simulated data is excellent. This plot is presented in the body of this report.

If you have any questions, please call Marc Pearcy or Angie Fenton at 405 840 2781.

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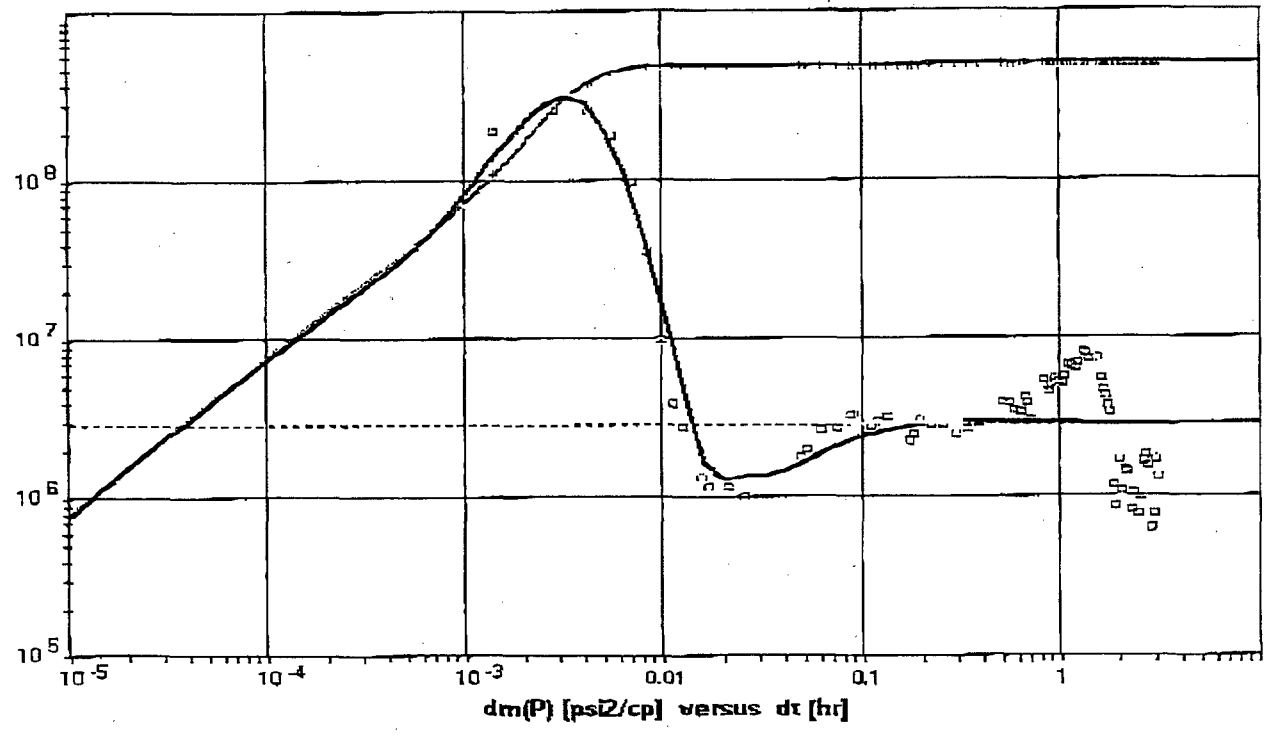
INTERPRETATION PLOTS

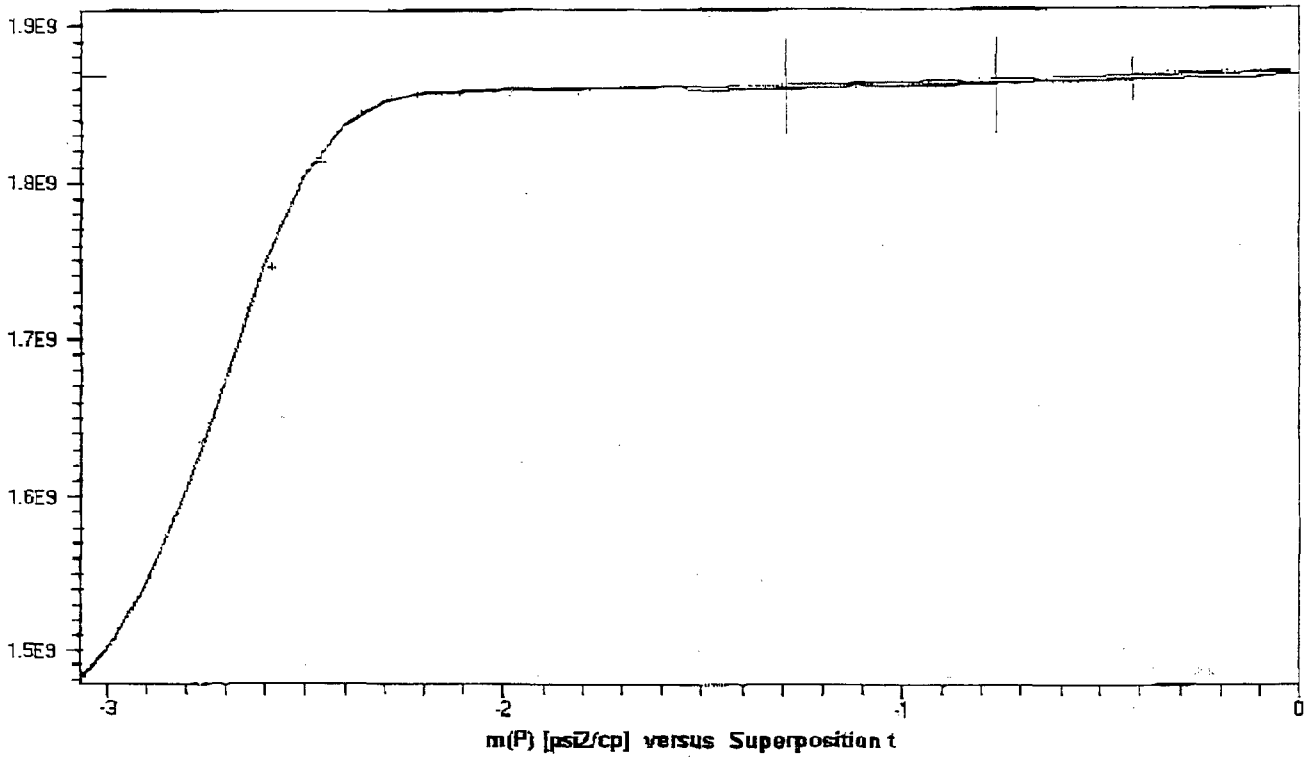
BUILD UP

Schlumberger

LOG LOG DIAGNOSTIC PLOT



SEMI LOG PLOT



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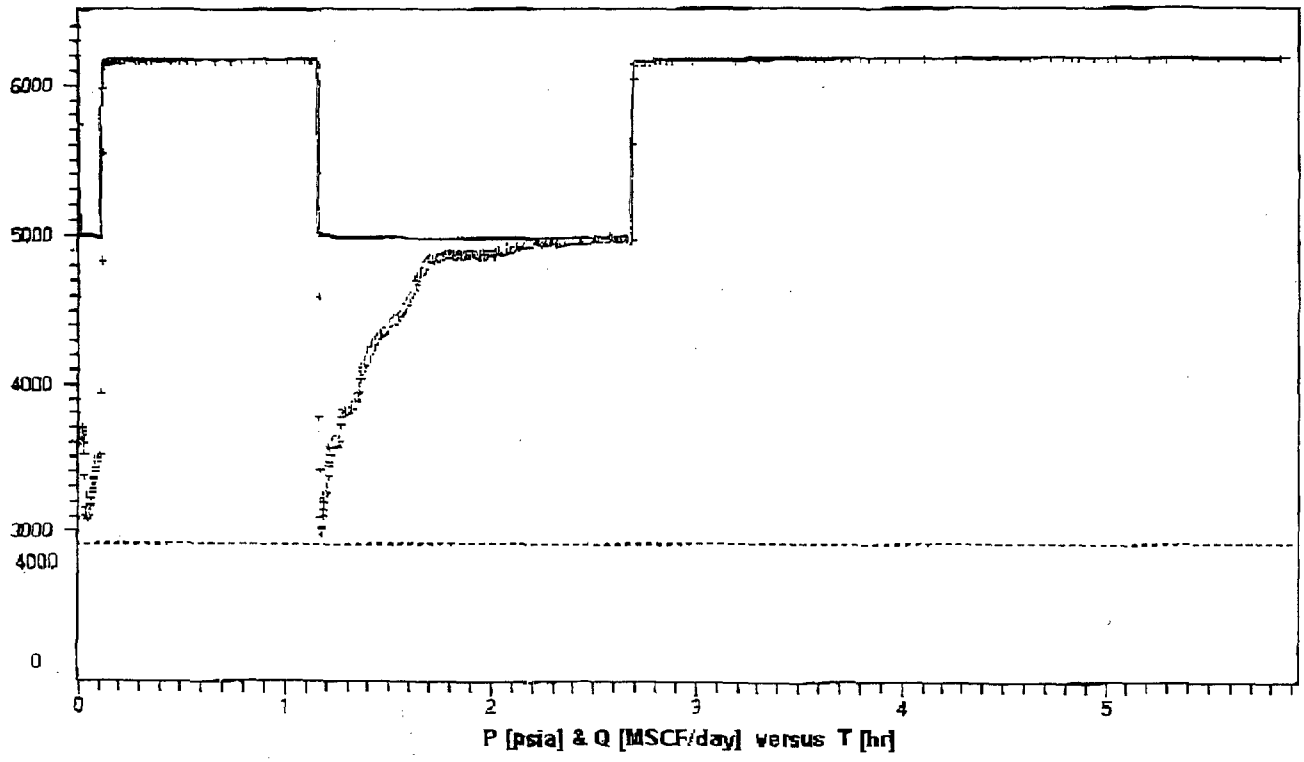
Schlumberger

INTERPRETATION PLOTS

BUILD UP - CONTINUED

PRESSURE SIMULATION



FLOWRATE HISTORY

Schlumberger

Flow Period Duration (hrs)	Flow Period Production Rate (MSCFD)
0.10968	4000
1.04583	0
1.52778	4000
3.25371	0

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
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Via Facsimile

May 22, 1998

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Re: Application of Gillespie-Crow, Inc., Case No. 11724 (*De Novo*)
Application of Hanley Petroleum, Inc. and Yates Petroleum Corp., Case No. 11954
Application of EEX Corporation, Case No. _____

Gentlemen:

On May 15, 1998, EEX Corporation ("EEX") filed an application to expand the West Lovington Strawn Unit. EEX also filed a Motion for Consolidation to consolidate its expansion application with that of Case No. 11724 (*de novo*) and Case No. 11954, previously consolidated by letter decision dated March 26, 1998. The two consolidated cases are hereby consolidated with this newest case, and the consolidated case is currently set for hearing on June 18, 1998.

On May 13, 1998, I conducted a review of the seismic data that had been ordered to be produced by EEX by letter decision dated April 6, 1998. The review did not change my opinion that the data are relevant to the pending applications. Also, because the data were shared with the original unit interest owners, the data should be available to the proposed unit interest owners.

Both Gillespie-Crow, Inc. and EEX may want to propose a protective order to limit access and protect against public disclosure of the data.

Sincerely,

Lori Wrotenbery

Lori Wrotenbery
Director

EXHIBIT
C

FIFTH JUDICIAL DISTRICT COURT
COUNTY OF LEA
STATE OF NEW MEXICO

EEX CORPORATION,

Petitioner,

vs. **No. CV 98-257C**

NEW MEXICO
OIL CONSERVATION COMMISSION,

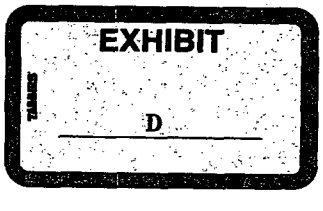
Respondent.

OIL CONSERVATION COMMISSION'S
MOTION TO DISMISS
NOTICE OF APPEAL AND PETITION FOR REVIEW

The New Mexico Oil Conservation Commission ("Commission"), by and through its undersigned attorney, pursuant to Rule 1-012(B)(1) of the Rules of Civil Procedure for the District Courts hereby moves this Court to dismiss the Notice of Appeal and Petition for Review for lack of subject matter jurisdiction, and in support thereof states:

1. The Petitioner is an applicant in a consolidated case before the Commission that involves three applications for statutory unitization of certain property interests in Lea County, New Mexico. The three applications pending before the Commission are the following:

A. Application of Gillespie-Crow, Inc. ("Gillespie") for unit expansion, statutory



unitization, and Qualification of the Expanded Unit Area for the Recovered Oil Tax Rate and Certification of a Positive Production Response Pursuant to the New Mexico Enhance Oil Recovery Act - **Case No. 11724;**

B. Application of Hanley Petroleum, Inc. and Yates Petroleum Corporation ("Hanley-Yates") for Unit Expansion, Statutory Unitization, and Qualification of the Expanded Unit Area for the Recovered Oil Tax Rate and Certification of a Positive Production Response Pursuant to the New Mexico Enhanced Oil Recovery Act - **Case No. 11954**

C. Application of EEX Corporation for Unit Expansion, Statutory Unitization and Qualification for the Recovered Oil Tax Rate - **Case No. 11987**

2. Before Case No. 11724 could be heard by the Commission, the two other applications related to the property in Lea County were filed, and a motion to consolidate all three cases was granted by the Commission.

3. The consolidated case has not been heard by the Commission.

4. The parties in this consolidated case have engaged in discovery by means of subpoenas duces tecum.

5. The Petitioner seeks to have the Court review a discovery order made by the Commission's Chair directed to the Petitioner and Gillespie to produce seismic data in response to a subpoena duces tecum issued by the Commission's Chair at the request of two of the parties to the consolidated case, Hanley-Yates. The Commission's Chair made this discovery order pursuant to the Commission's delegation of authority to her to make preliminary decisions in administrative hearings pending before the Commission and as authorized by NMSA 1978, § 70-2-8 (1935 as amended through 1977).

6. The Petitioner claims that the seismic data is a trade secret and not subject to discovery. In fact, the Petitioner has acknowledged that it shared this seismic data with interest

owners of the original unit, but it has been unwillingly to share the seismic data with interest owners in the property the Petitioner seeks to expand the unitization unit to include:

1) Exhibit A, attached hereto, is a draft confidentiality agreement dated May 21, 1998, from J. Scott Hall, attorney for the Petitioner, that acknowledges that the seismic data at issue in this case was disclosed in 1994 to Phillips Petroleum Company ("Phillips").

2) Exhibit B, attached hereto, is a letter dated June 1, 1998, from Mr. Hall to the Commission's Chair. In this letter Mr. Hall states that the seismic data was made available to Phillips, David Petroleum and Snyder Ranches, Inc.

3) Exhibit C, attached hereto, is a letter dated June 3, 1998, from Mr. Hall to William F. Carr, attorney for Hanley-Yates, acknowledging that the seismic data was reviewed by Phillips and Platt in 1994.

7. The issue the Petitioner seeks to have reviewed by the Court is not ripe for consideration by the district court. Appellate courts generally lack jurisdiction to entertain appeals from non-final orders. *Carmona v. Hagerman Irrigation Co.*, 1998-NMSC-007, ¶ 20. In evaluating the finality of an order for purposes of ripeness, one consideration is the potential harm or hardship that could result from denying a review of agency action. *Mills v. New Mexico State Bd. Of Psychologist Examiners,* 1997-NMSC-028, 123 N.M. 421. The seismic data in question is clearly not a trade secret and has been shared with various interest owners in the existing or proposed unit as evidenced from the acknowledgments of the Petitioner's attorney. The seismic data is relevant to the consolidated case pending before the Commission.

8. The Statutory Unitization Act requires that the applicant for unitization make a good faith effort to secure voluntary unitization with the pool or portion thereof directly affected. *See*

NMSA 1978, § 70-7-6A(5). The Petitioner has clearly shared the seismic data with certain interest owners in the affected pool, but the Petitioner refuses to share this seismic data with other interest owners in the pool. The Petitioner has not made a good faith effort to achieve voluntary unitization as the Petitioner refuses to share previously shared data with certain interest owners in the proposed expanded pool.

9. The discovery order is not an order of the Commission that can be appealed pursuant to NMSA 1978, § 70-2-25 (1935, as amended through 1981) or 19 NMAC 15.N.1220. NMSA 1978, § 70-2-25 pertains to final orders of the Commission from administrative hearings at which evidence is heard. 19 NMAC 15.N.1220 states, in part:

> Any party to the proceeding adversely affected by the order or decision rendered by the Commission **after hearing before the Commission** may apply for rehearing pursuant to and in accordance with the provisions of Rule 1222....

(Emphasis added.) The Petitioner is seeking a review by this Court akin to an interlocutory review of a discovery order from a district court to an appellate court as there has been no evidentiary hearing before the Commission.

10. The Petitioner seeks to circumvent the statutory requirements for this administrative appeal by filing a premature Notice of Appeal and Petition for Review with this Court.

11. The district court does not have subject matter jurisdiction over the subject matter of the Petition for Review or Notice of Appeal.

WHEREFORE, the Commission moves for an order of the Court dismissing the Petition for Review and Notice of Appeal.

Marilyn S. Hebert
Special Assistant Attorney General
New Mexico Oil Conservation
Commission
2040 South Pacheco
Santa Fe, New Mexico 87505
(505) 827-1364

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **New Mexico Oil Conservation Commission's Motion to Dismiss** was delivered by first-class mail, postage prepaid, this 11th day of August, 1998, to:

J. Scott Hall
Post Office Box 1986
Santa Fe, New Mexico 87504-1986

Marilyn S. Hebert
Special Assistant Attorney General
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Commission
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FIFTH JUDICIAL DISTRICT COURT
COUNTY OF LEA
STATE OF NEW MEXICO

EEX CORPORATION,

Petitioner,

v. **NO. CV 98-257C**

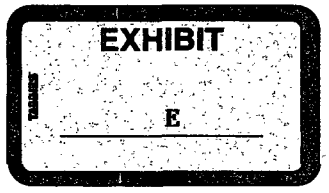
NEW MEXICO
OIL CONSERVATION COMMISSION,

Respondent.

OIL CONSERVATION COMMISSION'S
REPLY TO EEX'S RESPONSE TO
THE COMMISSION'S MOTION TO DISMISS

The New Mexico Oil Conservation Commission's (Commission) Motion to Dismiss should be granted because the issue the Petitioner has appealed is not ripe for review. Whether a discovery order made by an administrative body prior to any administrative adjudicatory hearing is ripe for review by the District Court must be determined in light of the law and the facts of the particular case.

The Petitioner seeks to have the District Court second-guess a discovery order of the New Mexico Oil Conservation Division's (Division) Director as hearing officer for preliminary matters in cases pending before the Commission. The Division Director, by letter dated April 6, 1998, set forth the reasons the seismic data were relevant and noted that the parties admitted that property interest owners in the original unit had the opportunity to review the seismic data. *See* Division Director's letter dated April 6, 1998, Exhibit A-3 attached to the Petitioner's Response.



Additionally, at the Petitioner's request, the Division Director conducted a review of the seismic data that is the subject of the discovery order. Following the review, the Division Director remained convinced that the seismic data was relevant to the unit expansion case pending before the Commission. *See* Division Director's letter dated May 22, 1998, Exhibit C -2 attached to Petitioner's Response.

The Petitioner provides some background facts for the Court, but the Petitioner fails to present the context in which the seismic data was requested and ordered produced. The Petitioner briefly refers to the administrative hearing in 1995 (1995 Hearing) before a Division hearing examiner that established the original unit, the West Lovington Strawn Pool. All three applications, now consolidated into one case, pending before Commission seek to expand this West Lovington Strawn Pool. The Petitioner fails to inform the Court that the seismic data was the subject of a significant amount of testimony at the 1995 Hearing. There were eight witnesses at the 1995 Hearing; four of these witnesses testified extensively regarding the seismic data that is the subject of the discovery order on appeal.

Attached hereto are the following excerpts from the 1995 Hearing:

1. Exhibit 1 contains the opening statements of the attorneys from the transcript of the 1995 Hearing, pages 7 through 10. On page 10, James Bruce, attorney for Gillespie-Crow, states that three different companies involved in the unit looked at the seismic data.

2. Exhibit 2 is the testimony of William Crow, geologist for Gillespie-Crow, from the transcript of the 1995 Hearing, pages 11 through 76. Mr. Crow's testimony is replete with references to the seismic data. *See* pages 18, 19, 21, 28-30, 40-42, 46, 50, 51, 60, 71, 72, and 76.

3. Exhibit 3 is the testimony of David A. Scolman, geophysicist for Gillespie-Crow, from

the transcript of the 1995 Hearing, pages 107 through 134. Mr. Scolman's testimony also contains much discussion of the seismic data. *See* pages 109-114, 116-119, 129, and 133.

4. Exhibit 4 is the testimony of Michael G. Clemenson, geologist for Snyder Ranches, Inc., from transcript of the 1995 Hearing, pages 146 through 187. Mr. Clemenson states that he and another employee of Snyder Ranches, Inc. reviewed the seismic data along with employees of EEX (then Ensearch) and Gillispie-Crow. *See* page 149. Mr. Clemenson continues to testify regarding the seismic on pages 164 through 167, 173, 181 and 182.

5. Exhibit 5 is the testimony of Brad Birkelo, geophysicist for Phillips Petroleum Company, from the transcript of the 1995 Hearing, pages 247-271. Mr. Birkelo also testifies as to the seismic data.

The seismic data was an integral part of the 1995 Hearing and the formation of the resulting original unit. The parties seeking the seismic data have property interests that are proposed to be included in the expanded unit. The Statutory Unitization Act, NMSA 1978, §§ 70-7-1 through 70-7-21(1975) is the authority for the Division and Commission to form units for production absent the consent of all property interest owners in the unit to prevent waste. To the extent that the Statutory Unitization Act authorizes interference with private property rights, it is of utmost importance that information relevant to the formation of the original unit be available to those whose interests are included in any unit expansion.

Cases in other oil and gas producing states as well as law review articles support the sharing of seismic data in these forced pooling situations. In *Louisiana Land and Exploration Co. v. Wyoming Oil and Gas Conservation Commission*, 809 P.2d 775 (Wyo. 1991) the Wyoming Supreme Court remanded the case to the commission to consider a claim that the input

data used to create the computer simulation model was wrong. The court concluded that the litigant was entitled to a realistic opportunity to pursue discovery regarding technical information where the validity of the data could determine the outcome of the hearing. The court afforded the complaining party the opportunity to assess the validity of the factors included in the model's development. The court, in support of its decision, quoted the following:

> [T]here is considerable potential for misuse in reservoir simulation. A modeler so inclined may slant or tilt the simulator in such a manner that the simulator will produce only the results desired by the modeler. The simulator may be affected by the manner in which the underlying programs are written, by the data used, by model manipulation, or by a combination of these. In turn, expert testimony based upon misuse of a reservoir simulation will mislead the trier of fact, rather than assist as required by the Federal Rules of Evidence. **Only through complete discovery of all aspects of a party's simulation work can the potential for misuse be avoided.**

(Emphasis added.)
Eugene A. Lang, Jr., *A Primer on Computer Simulation of Hydrocarbon Reservoirs*, XXII Land & Water L. Rev. 119, 133-34 (1987) (footnotes omitted).

An earlier case from Oklahoma involved the applicant's expert witness's testimony regarding a geologic structure map. On cross examination the expert revealed that he had drawn his map based, in part, on seismic data. When asked to produce the seismic data, the applicant refused on the grounds that the data were confidential and acquired at a great cost. The state commission decided that the applicant's refusal to reveal underlying seismic data rendered the expert witness's map and testimony incompetent. *Hester v. Sinclair Oil and Gas Co.*, 351 P.2d 751 (1960). The court affirmed the commission's action opining that if the data are clearly relevant, the end result will most likely be that full discovery will be permitted subject, possibly, to a protective order limiting access and protecting against public disclosure.

Neither the Trade Secrets Act nor NMRA 11-508 Prohibits Use of the Data in Adjudications

As the testimony in the exhibits to this Reply prove, the Petitioner and other parties used the interpretations of the seismic data in the presentations at the 1995 Hearing on the original statutory unitization case, and the interest owners in the original unit had the opportunity to review the seismic data. The Petitioner cannot on the one hand use the data and interpretations to make its case and on the other claim that other parties cannot have access to such information based on the Trade Secrets Act or an evidentiary privilege.

The Trade Secrets Act in unambiguous language states that it exists to prevent the dissemination of trade secrets acquired by "improper means." A properly issued subpoena duces tecum under the authority of NMSA 1978, § 70-2-8 is not the "improper means" the Trade Secrets Act is designed to prevent. The United States Supreme Court set forth the following requirements that an agency must meet in issuing subpoenas: 1) the inquiry must be within the authority of the agency; 2) the demand must not be too indefinite; and 3) the information must be reasonably relevant to the purpose of the investigation." *In re Investigation No. 2 of the Governor's Organized Crime Commission*, 91 N.M. 516, 517, 577 P.2d 414, 415 (1978) (*citing United States v. Morton Salt Co.*, 338 U.S. 632, 652, 70 S.Ct. 357, 94 L.Ed 401 (1950)). All of the criteria has been met in this case.

Additionally, the Petitioner complains that no protective order was entered limiting the dissemination of the seismic. The Division Director's letter dated May 22, 1998, attached as Exhibit C-2 to the Petitioner's Response, suggested that the Petitioner might propose such a

protective order to limit access to the information and protect against public disclosure. Apparently Petitioner attempted to reach an agreement with other parties to the consolidated case on a protective order, but the Commission was never presented a proposed order to consider. So the Petitioner really has no basis for complaining about the lack of a protective order. Such a protective order could still be proposed and issued to prevent unnecessary publication of the seismic data.

Neither the Petition for Review nor the Notice of Appeal Is Authorized by Statute or the Collateral Order Doctrine

1. The Petitioner does not have a statutory right of review of this discovery order.

The Petitioner claims the review of this discovery order is authorized by statute and sets forth a portion of NMSA 1978, § 70-2-25. However, that statute pertains to decisions of the Commission rendered after an evidentiary hearing. The remainder of the statute related to the district court review supports this interpretation. The statute states, in part: "In the event **the rehearing** is granted, the commission may enter such new order or decision **after rehearing** as may be required under the circumstances." (Emphasis added.) The word "rehearing" indicates there has been a hearing. In this case, no hearing has been held.

The following is a section of paragraph B of NMSA 1978, § 70-2-25:

> The trial upon appeal [in the district court] shall be without a jury, and the **transcript of proceedings before the commission, including evidence taken in hearings by the commission, shall be received in evidence by the court** in whole or in part upon offer by either party, subject to legal objections to evidence. The commission action complained of shall be prima facie valid and the burden shall be upon the party or parties seeking review to

establish the invalidity of such action of the commission.

(Emphasis added.)

Since there has been no hearing, there is no transcript for the District Court to review. This statute does not authorize an appeal of a discovery order issued prior to an evidentiary hearing.

2. **The collateral order doctrine is not applicable to this administrative discovery order.**

The case cited by the Petitioner, *Carrillo v. Rostro*, 114 N.M. 607, 845 P.2d 130 (1992), involved a district court order that denied a motion for summary judgment based on qualified immunity; it was not an administrative adjudication. The Supreme Court adopted the collateral order doctrine in *Carrillo* and reasoned that as qualified immunity was an immunity from suit, it was a non-final order that came within the narrow exception that was appropriate for review by the appellate court prior the conclusion of the trial court proceedings.

However, the Supreme Court in adopting the collateral order doctrine had some concerns as to its adoption for the strong policy against piecemeal appeals and for the final-judgment rule:

> The collateral order doctrine has its shortcomings, and numerous courts have therefore limited its application. *See* 15A Charles A. Wright et al., *Federal Practice & Procedure* § 3911, at 353 & n.64 (2d ed. 1991) ("Alongside the attempt to capture collateral order theory in a formula are many statements that the theory must not be too much expanded, lest the exception swallow the basic finality requirement and swamp the dockets with collateral orders appeals.")

The case that does consider the issue of appeals of non-final orders in administrative hearings is *Mills v. New Mexico State Board of Psychologist Examiners*, 1997-NMSC-028, 123 N.M. 421. A primary consideration in evaluating the finality of an order for purposes of ripeness is the potential harm or hardship that could result from denying a review of agency action until

the conclusion of the administrative proceedings. As evidenced from the testimony from the 1995 Hearing, interest owners in the original unit were allowed to review this seismic data and the data is relevant. Any potential harm to the Petitioner could be mitigated by a protective order.

The Commission asks that the District Court dismiss the Petition for Review and Notice of Appeal as the issue appealed is a non-final order in an adjudicatory hearing and is not ripe for review by the District Court.

Respectfully submitted,

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