

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

**APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION THROUGH
THE SUPERVISOR OF DISTRICT II FOR AN EMERGENCY ORDER SUSPENDING
CERTAIN APPROVED APPLICATIONS FOR PERMITS TO DRILL, AND FOR
ADOPTION OF SPECIAL RULES FOR DRILLING IN CERTAIN AREAS FOR THE
PROTECTION OF FRESH WATER, CHAVES AND EDDY COUNTIES, NEW MEXICO.**

Case No. 15487

**PRE-HEARING STATEMENT
OF LIME ROCK RESOURCES II-A, L.P.**

Lime Rock Resources II-A, L.P. ("Lime Rock") submits this Pre-Hearing Statement as required by the Oil Conservation Commission.

APPEARANCES

PARTIES

Applicant Oil Conservation Division

Pecos Valley Artesian Conservancy District

ATTORNEYS

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STATEMENT OF THE CASE

The Fifth Amended Application for Rulemaking filed by the Oil Conservation Division (“the Division”) requests an order amending 9.15.39 NMAC by adding a new section 11 that would apply to newly-drilled wells within a Division-specified Designated Area. The intended effect of the Division’s proposed rule is a requirement of two strings of surface protection casing in any well drilled through the shallow and artesian aquifers within the Designated Area.

Lime Rock opposes the Division’s application on the grounds that the proposed rule: (1) is unnecessary in light of the Division’s current statewide rules, which provide adequate protection for the shallow and artesian aquifers, and historical and current drilling practices within the Designated Area that have proven to be protective of both aquifers; and (2) would result in excessive drilling costs and increased drilling and safety risks.

PROPOSED EVIDENCE

<u>WITNESS</u>	<u>ESTIMATED TIME</u>	<u>EXHIBITS</u>
John Maxey (Engineer)	30 minutes	8

In accordance with 19.15.4.13(B)(2) NMAC, Lime Rock has attached hereto copies of the documentary exhibits (Exhibit Nos. 1 through 8) that it proposes to offer into evidence at the hearing.

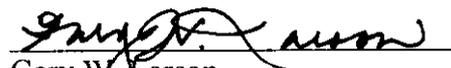
Lime Rock reserves the right to call a rebuttal witness(es) and introduce rebuttal exhibits if appropriate.

PROCEDURAL MATTERS

Lime Rock is not aware of any procedural matters to be resolved prior to or at the hearing.

Respectfully submitted,

HINKLE SHANOR LLP

A handwritten signature in black ink, appearing to read "Gary W. Larson", is written over a horizontal line.

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CERTIFICATE OF SERVICE

I hereby certify that on this 21st day of November, 2016, I served a true and correct copy of the foregoing *Pre-Hearing Statement of Lime Rock Resources II-A, L.P.* via email to:

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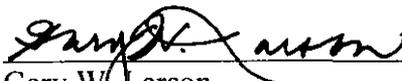
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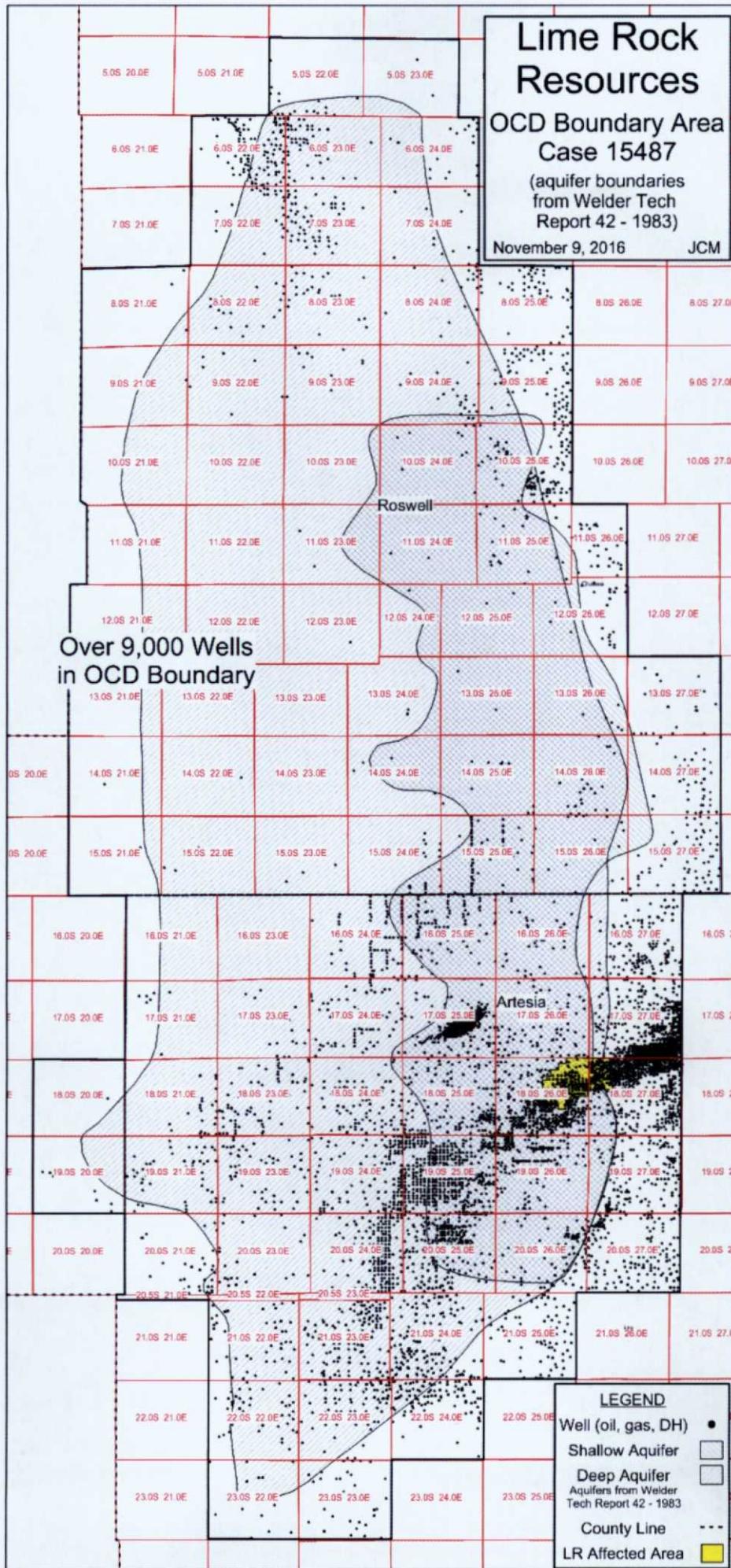


Gary W. Larson

Lime Rock Resources

OCD Boundary Area
Case 15487
(aquifer boundaries
from Welder Tech
Report 42 - 1983)

November 9, 2016 JCM



OCC Case No. 15487
LIME ROCK RESOURCES II-A
Exhibit # 1

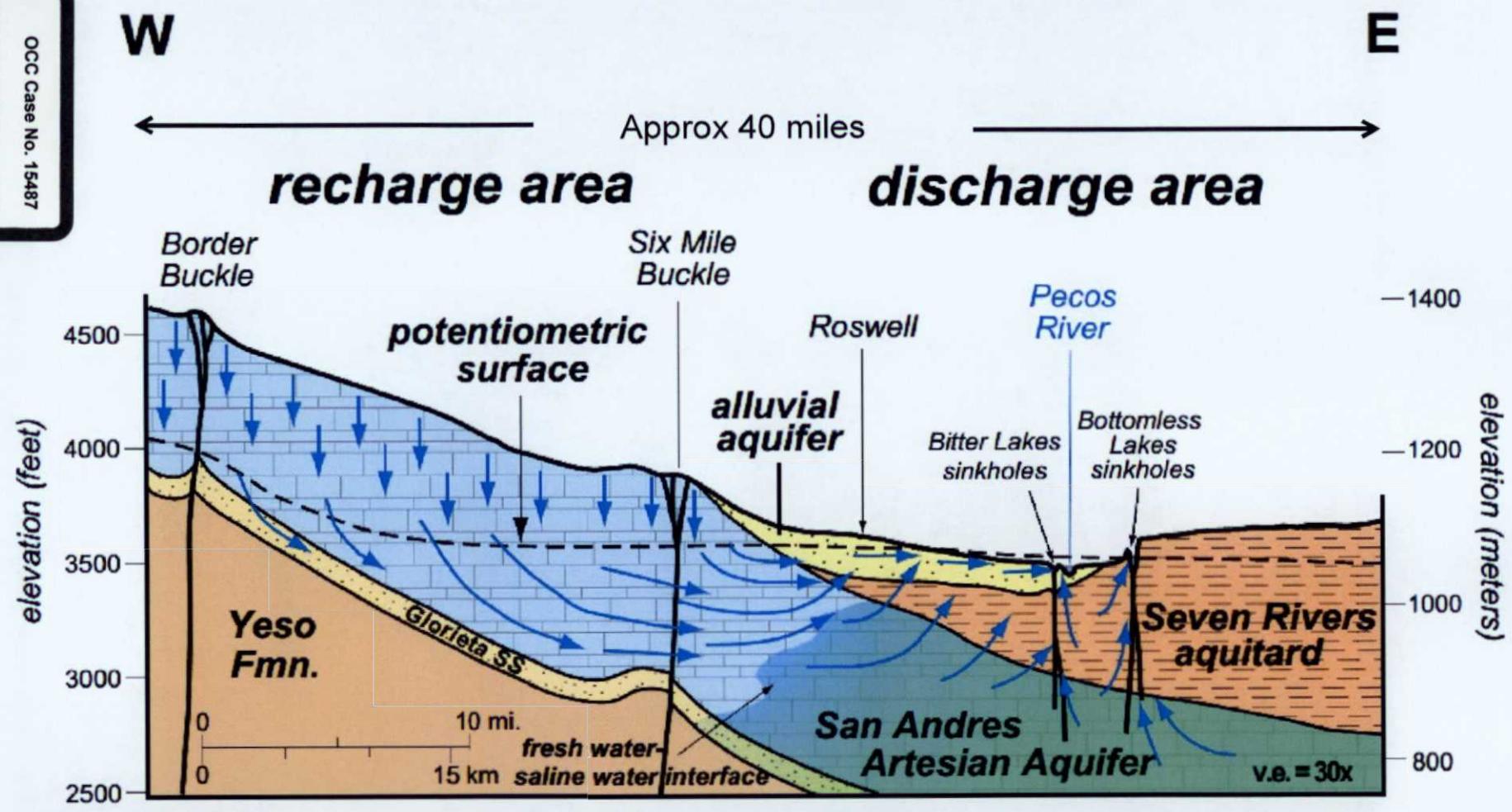
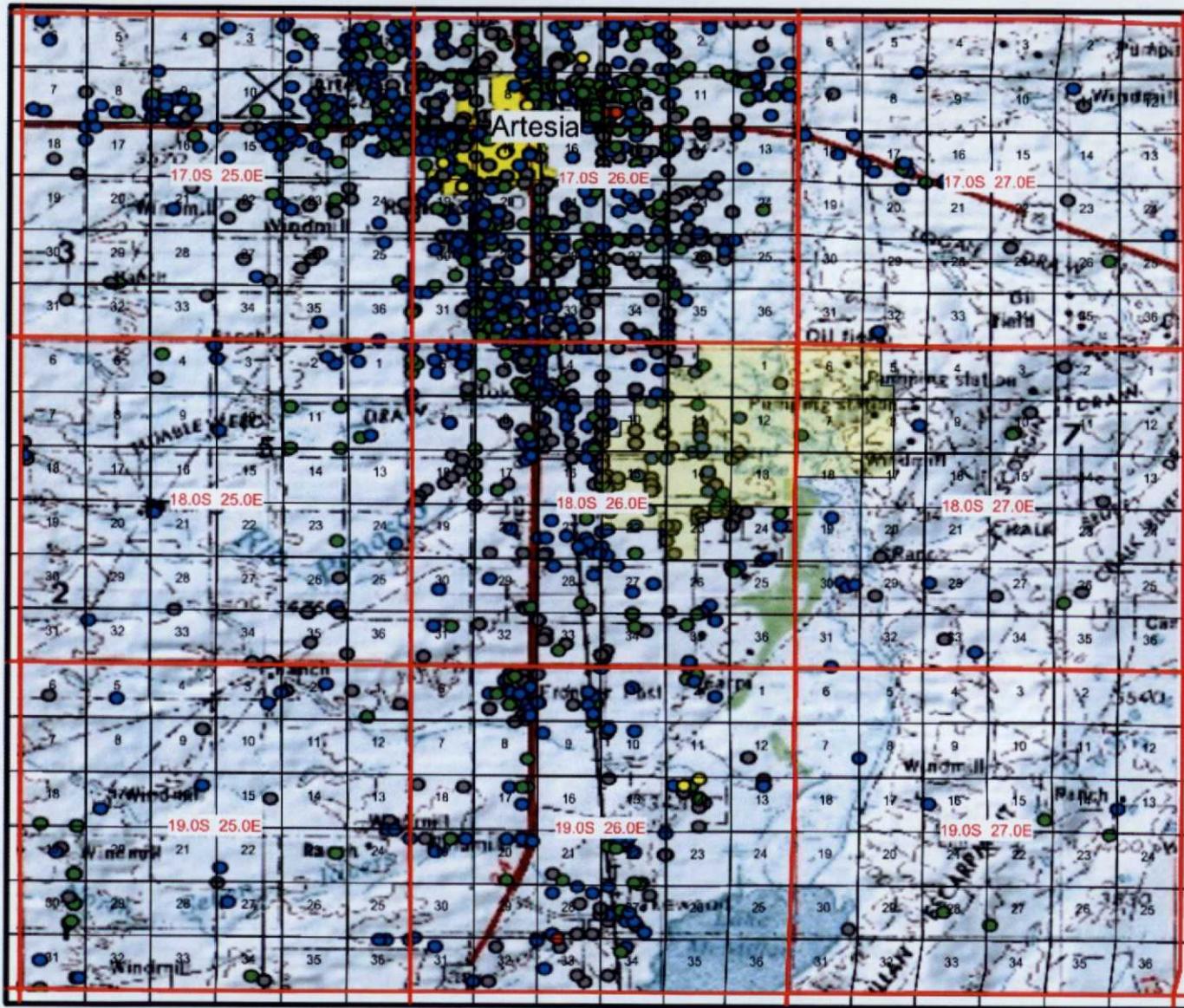


Figure 2—West-east hydrostratigraphic section illustrating regional ground water flow patterns within the artesian and shallow aquifers. Arrows indicate general direction of ground water flow. Line of section shown in figure 1.



Lime Rock Resources
Oil Industry - Water Industry

Water Well Locations
9 Township Area

November 8, 2016 JCM

Legend
 (Water well spots and designations from OSE website)

Lime Rock affected acreage in Yellow

- Active
- Capped
- Inactive
- Pending
- Plugged
- Oil, Gas, or P&A
- Other Values

OCC Case No. 15487
 LIME ROCK RESOURCES II-A
Exhibit # 3

Lime Rock Acreage in Yellow

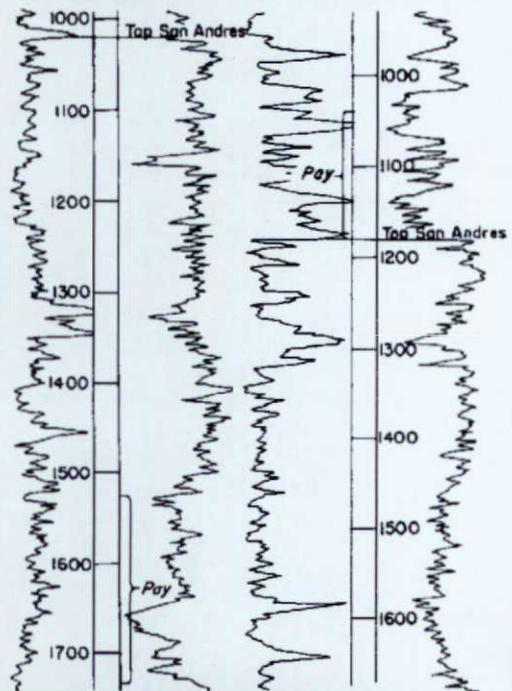
R 26 E

Outline of RGS Atoka SA Study Cum 8 MMBO 12 BCF 8 MMBW (157 wells)

Atoka Grayburg 395 MBO 1.9 MMBW 13 Depth 950' - 990' 14H 134 BOPD 50 psi flowing on 16/64 ck

TYPE LOG ATOKA SAN ANDRES POOL

TYPE LOG DAYTON GRAYBURG POOL



Outline of RGS Dayton SA Study Cum 10 MBO 807 MCF 11.6 MBW

Outline of RGS Dayton GB Study, Cum 245 MBO 197 MMCF 22 MBW

ATOKA SAN ANDRES POOL & DAYTON GRAYBURG POOL EDDY COUNTY, NEW MEXICO STRUCTURAL CONTOURS ON TOP OF SAN ANDRES SCALE IN FEET 4000' 8000'

OCTOBER, 1956

R 26 E

OCC Case No. 15487

LIME ROCK RESOURCES II-A

Exhibit # 4

Data prepared by: Symposium Committee
 Affiliation: Roswell Geological Society
 Date: Aug. 31, 1960

Field Name: Dayton San Andres
 Location: Sec. 27, 35, T.18 S., R. 26 E.
 County & State: Eddy Co., N. Mex.

DISCOVERY WELL: Simms & Reese #3 Fedell
 PAY ZONE: San Andres (Permian). Gray to tan fine crystalline dolomite. Production is from a series of thin porosity zones in the upper 600 feet of the San Andres. Porous zones vary in thickness and stratigraphic position.

COMPLETION DATE: July 5, 1956

TYPICAL CORE ANALYSIS OF A PAY INTERVAL IN THIS FIELD:

Perm. in millidarcys		% Porosity	Liquid Saturation (% of pore space)	
Horizontal	Vertical		Water	Oil

OTHER SHOWS ENCOUNTERED IN THIS FIELD: Shows are found in the lower Queen Grayburg section.

TRAP TYPE: Stratigraphic

NATURE OF OIL: Gravity 37° API

NATURE OF GAS: None reported

NATURE OF PRODUCING ZONE WATER:

Resistivity:

ohm-meters @

°F.

	Total Solids	Na+K	Ca	Mg	Fe	SO ₄	Cl	CO ₃	HCO ₃	OH	H ₂ S
ppm											

INITIAL FIELD PRESSURE: Not available

TYPE OF DRIVE: Water

NORMAL COMPLETION PRACTICES: Casing is set through pay and perforated. Formation is then given a small treatment of mud acid followed by sandfrac.

PRODUCTION DATA:

Year	Type	No. of wells @ yr. end		Production Oil in barrels Gas in MMCF	
		Producing	Shut in or Abnd.	Annual	Cumulative
1956	oil	1		301	301
	gas				
1957	oil		1	292	593
	gas				
1958	oil	1	1	212	805
	gas				
1959	oil	1	1	305	1,110
	gas				
1960*	oil	1	1	107	1,217
	gas				

* 1960 Figure is production to July 1, 1960.

Data prepared by: Symposium Committee
 Affiliation: Roswell Geological Society
 Date: 10-30-56

Field Name: Dayton (Grayburg)
 Location: Secs. 24, 25, 26, & 35, T. 18 S., R. 26 E.
 County & State: Eddy County, New Mexico

DISCOVERY WELL: Bassett & Birney et al #1 Platt

COMPLETION DATE: 9-3-40

PAY ZONE: Grayburg dolomite & sand: The oil occurrence is found in a 150' interval above the San Andres with most of the production coming from the Grayburg sands. The dolomite is tan and gray, finely crystalline, sandy in spots, also having anhydrite inclusions; the oil apparently comes from fracture porosity. The sand is largely fine grained, gray quartz with dolomitic cementing material; however, on sand interval that probably carries throughout the pool and has the best shows, is medium to coarse grained gray quartz with the grains rounded and frosted.

TYPICAL CORE ANALYSIS OF A PAY INTERVAL IN THIS FIELD:

Perm. in millidarcys		% Porosity	Liquid Saturation (% of pore space)	
Horizontal	Vertical		Water	Oil
4		9	50	32

OTHER SHOWS ENCOUNTERED IN THIS FIELD: Shows are found in San Andres formation.

TRAP TYPE: Stratigraphic.

NATURE OF OIL: Gravity 36° A.P.I.

NATURE OF GAS: Sweet.

NATURE OF PRODUCING ZONE WATER: No Analysis Resistivity: ** ohm-meters @ °F.

ppm	Total Solids	Na/K	Ca	Mg	Fe	SO ₄	Cl	CO ₂	HCO ₃	OH	H ₂ S

INITIAL FIELD PRESSURE: Information not available.

TYPE OF DRIVE: Gas solution drive.

NORMAL COMPLETION PRACTICES: Wells were completed open hole and shot with nitro-glycerine.

PRODUCTION DATA:

Year	No. of wells @ yr. end			Production		Year	No. of wells @ yr. end			Production	
	Type	Prod.	Shut in or Abnd.	Oil in barrels	Gas in MMCF		Type	Prod.	Shut in or Abnd.	Oil in barrels	Gas in MMCF
				Annual	Cumulative					Annual	Cumulative
1941	oil			30,219	38,889	1949	oil	11	7	6,022	136,543
	gas						gas				
1942	oil			17,599	56,488	1950	oil	10	8	4,969	141,512
	gas						gas				
1943	oil			16,853	73,341	1951	oil	10	8	3,639	145,151
	gas						gas				
1944	oil			18,757	92,098	1952	oil	12	7	3,849	149,000
	gas						gas				
1945	oil			16,178	108,276	1953	oil	10	9	4,029	153,029
	gas						gas				
1946	oil	10	5	8,045	116,321	1954	oil	10	9	3,828	156,857
	gas						gas				
1947	oil	10	5	7,232	123,553	1955	oil	10	9	3,398	160,255
	gas						gas				
1948	oil	10	5	6,968	130,521	1956*	oil	10	9	1,263	161,518
	gas						gas				

* 1956 Figure is production to 5-1-56.

Refer to map of Atoka-San Andres Field for nature of shallow structure.

Data prepared by: Symposium Committee
 Affiliation: Roswell Geological Society
 Date: 10-30-56

Field Name: Atoka (San Andres)
 Location: Sec. 9, 10, 11, 14, 15, 21 & 22, T. 18 S.,
 County & State: R. 26 E.

Eddy County, New Mexico

DISCOVERY WELL: Jones #1 Terry.

COMPLETION DATE: 2-28-56

PAY ZONE: San Andres dolomite: The pay interval occurs in a fine to medium crystalline brown dolomite, having anhydrite inclusions, 500-650' below the top of the San Andres.
Shows are found both above and below this interval; however, these shows ranges from pin point and pin head to inter-crystalline, with apparently a preponderance of production coming from the intervals with inter-crystalline porosity.

TYPICAL CORE ANALYSIS OF A PAY INTERVAL IN THIS FIELD:

Perm. in millidarcys		% Porosity	Liquid Saturation (% of pore space)	
Horizontal	Vertical		Water	Oil
1.4		9	39	15.5

OTHER SHOWS ENCOUNTERED IN THIS FIELD: Shows are found in Lower Queen-Grayburg Section.
 Refer to Dayton-Grayburg Field.

TRAP TYPE: Stratigraphic
 NATURE OF OIL: 37° A.P.I. Gravity
 NATURE OF GAS: Sweet
 NATURE OF PRODUCING ZONE WATER:

Resistivity: 05 ohm-meters @ 75 °F.

	Total Solids	Na/K	Ca	Mg	Fe	SO ₄	Cl	CO ₂	HCO ₃	OH	H ₂ S
ppm	218,581	79,500	2240	2135	0	4140	130,000		566		90

INITIAL FIELD PRESSURE: 610 psi.

TYPE OF DRIVE: Gas Solution

NORMAL COMPLETION PRACTICES: Casing is set through pay and perforated, formation is then stimulated with a small amount of MCA followed by a sand-frac.

PRODUCTION DATA:

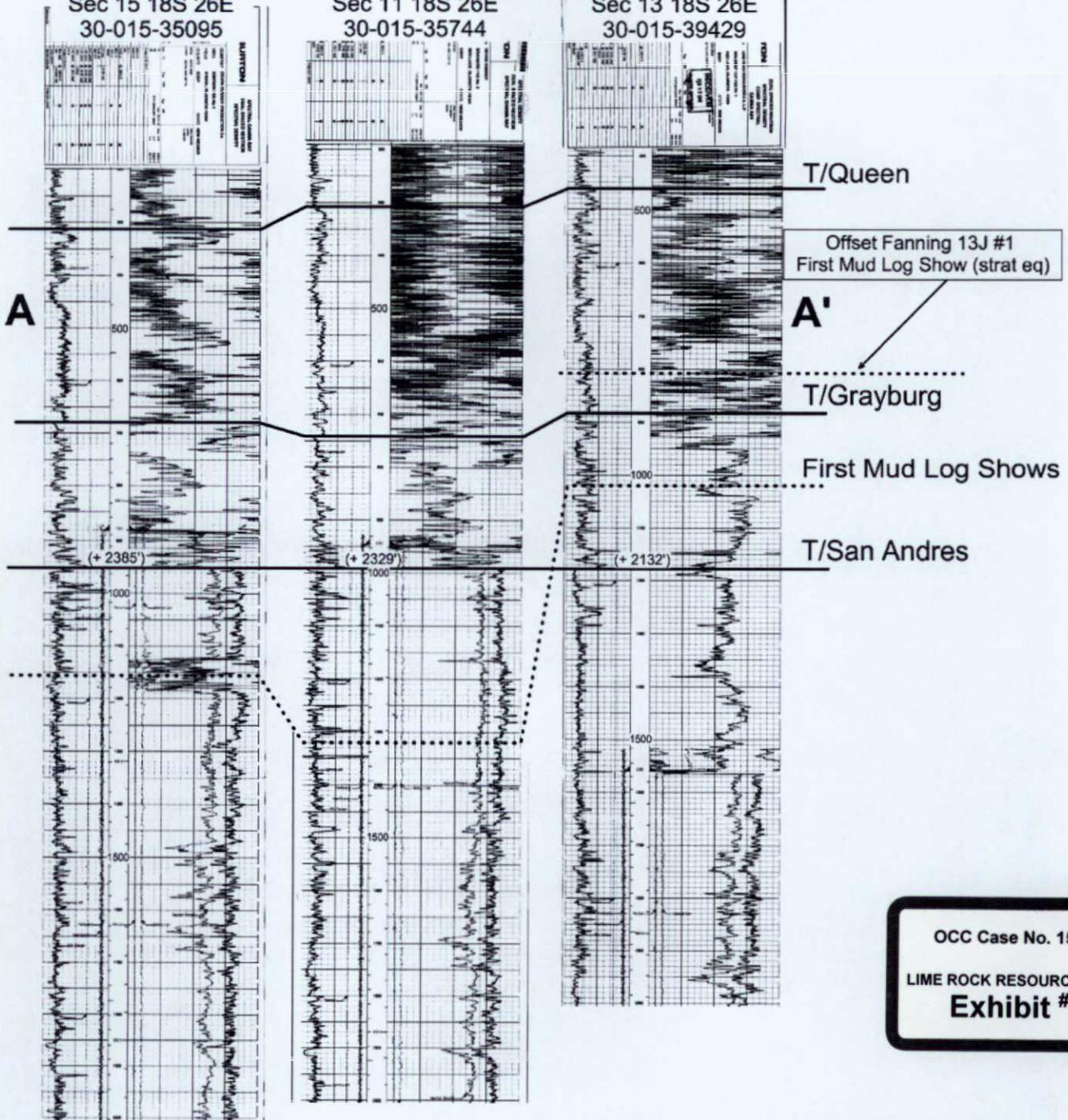
Year	No. of wells @ yr. end			Production		Year	No. of wells @ yr. end			Production	
	Type	Prod.	Shut in or Abnd.	Oil in barrels	Gas in MMCF		Type	Prod.	Shut in or Abnd.	Oil in barrels	Gas in MMCF
				Annual	Cumulative				Annual	Cumulative	
1941	oil					1949	oil				
	gas						gas				
1942	oil					1950	oil				
	gas						gas				
1943	oil					1951	oil				
	gas						gas				
1944	oil					1952	oil				
	gas						gas				
1945	oil					1953	oil				
	gas						gas				
1946	oil					1954	oil				
	gas						gas				
1947	oil					1955	oil				
	gas						gas				
1948	oil					1956*	oil	1	2,048	2,048	
	gas						gas				

* 1956 Figure is production to 5-1-56.

Simpson 15A #1
330 FNL & 330 FEL
Sec 15 18S 26E
30-015-35095

Brainard 11G #3
1650 FNL & 2310 FEL
Sec 11 18S 26E
30-015-35744

Waldrop 13 P Fee #1
990 FSL & 330 FEL
Sec 13 18S 26E
30-015-39429



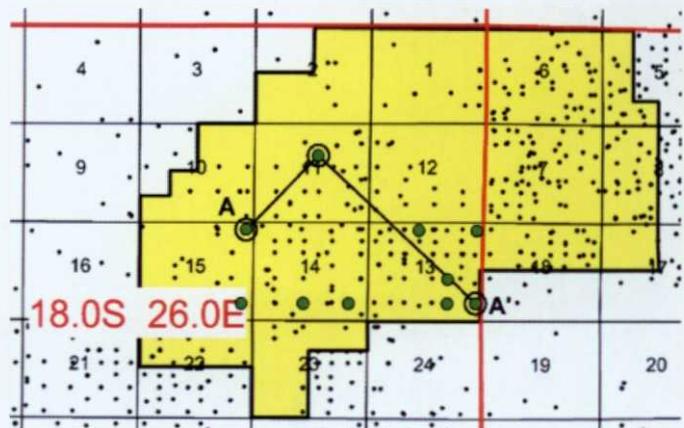
OCC Case No. 15487
LIME ROCK RESOURCES II-A
Exhibit # 5

● = wells used for first mud log show data
stats. Shallowest 740' (13J), deepest
1,320' (11G), average 1,176'.

Lime Rock Resources
Stratigraphic X-Section
**Tops & Shallowest
Mud Log Shows**

November 8, 2016

JCM



QUALITY LOGGING, INC

P.O. Box 2463

MIDLAND, TX 79702

(432)682-7168

OCC Case No. 15487

LIME ROCK RESOURCES II-A

Exhibit # 6

COMPANY: Lime Rock Resources II-A, L.P.

WELL: FANNING 13 J #1

FIELD: _____ COUNTY: EDDY STATE: NM

LOCATION: 2310' FSL & 1650' FEL

Section 13-T18S-R26E (NE Unit J)

Interval Logged: 450 To: 4326 G.L.: 3293.3 K.B.: 3306.7

Date Logged: 10-2-12 To: 10-8-12 Spud Date: _____

Rig: UNITED DRILLING #22 Unit No.: _____

Loggers: MIKE HERRING, CHRIS JAMES

Api No.: 30-015-40484

Filename: fanning_13_j_-1.mlw

Geologist: STAN BISHOP

Abbreviations:

NB...New Bit
CO...Circ Out
NR...No Returns
TG...Trip Gas
WOB...Wt on Bit
RPM...Rev/Min
SG...Survey Gas

DST...Drill Stem Test
DS...Directional Survey
CG...Connection gas
LAT...Logged After Trip
PP...Pump Pressure
SPM...Strokes/Min
DTG...Down Time Gas

Mud Data

WT...Weight
PH...Acidity
CHL...Chlorides

V...Viscosity
F...Filtrate
SC...Solids Content

Lithology Symbols:

	Anhydrite		Salt		Granite
	Siltstone		Chert		Sandstone
	Dolomite		Conglomerate		Limestone
	Coal		Shale		Bentonite
	Carb Shale		Granite Wash		Quartz Wash
	Red Sh		Org Sh		Green Sh
	Cust Sh1		Cust Sh2		Cust Sh3
	Cust Sh4		Cust Sh5		Cust Sh6

Accessories

Glauconite Pyrite Fossils Oolites

Fractures Cement

Gas Chromatograph Analysis:

HW -----

C1 -----

C2 -----

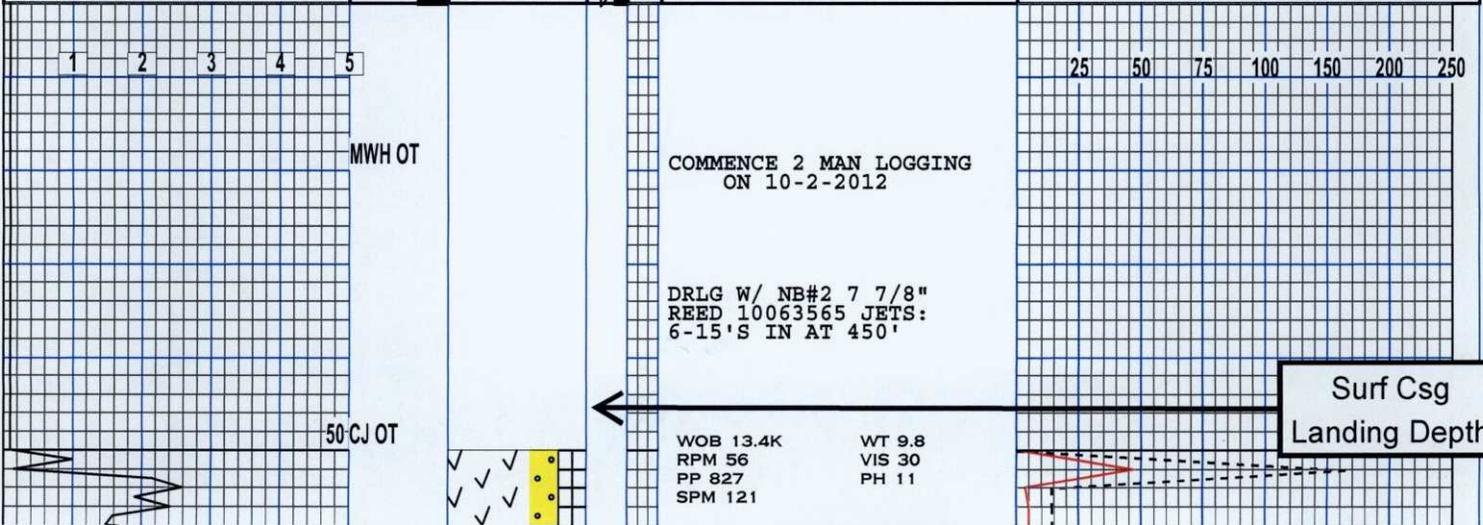
C3 -----

IC4 -----

NC4 -----

IC5 -----

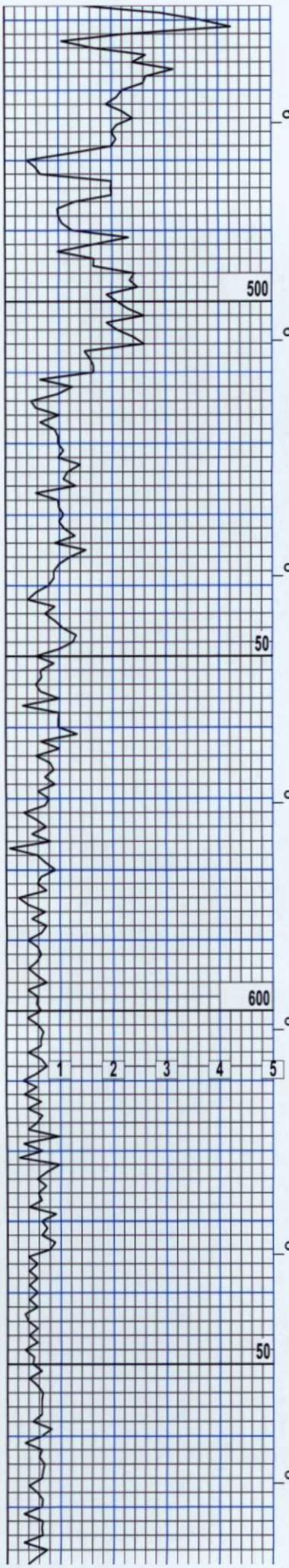
Drilling Rate MIN/FT	Vis Por	Lithology	% Oil Flu Tr / p f g	Cut Tr / p f g	Descriptions/Remarks	Total Gas/Chromatograph
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Surf Csg
Landing Depth

WOB 13.4K
RPM 56
PP 827
SPM 121

WOB 9.8
VIS 30
PH 11



SS: BFF, AMBER, CLR,
 TRNSL, VF TO FGRN, LSLY
 CONS W/ DOLO CMT, SBRND
 TO SBANG, MOD WLL SRTD,
 ARG IP

DOL: DKTN, LTBRN, TN
 MICXLN, FRM TO MOD FRM,
 CHLKY, ANHY IP, SHLY IP

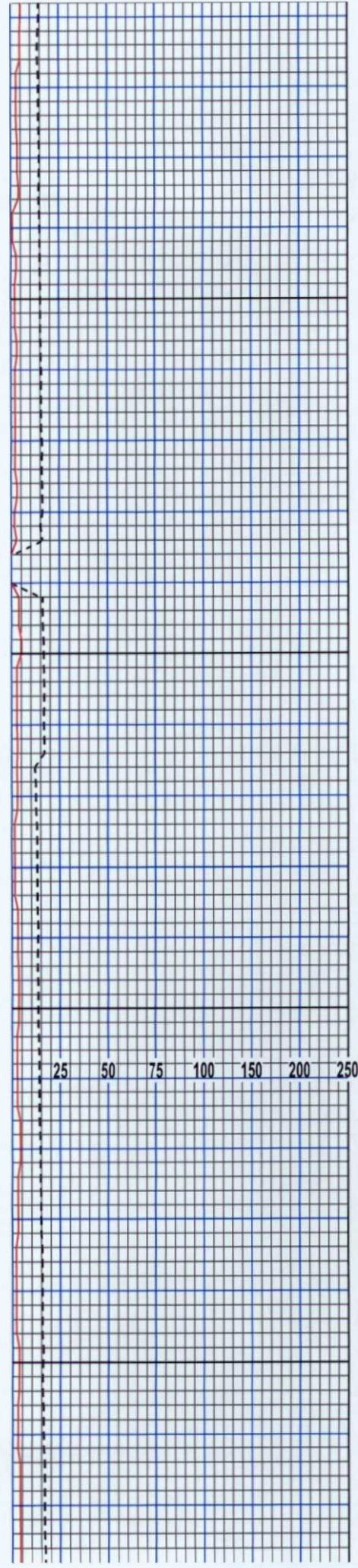
ANHY: OFF WHT, TRNSL,
 OPQ, CLR, MOD FRM TO
 FRM, DOLO IP, SHLY IP

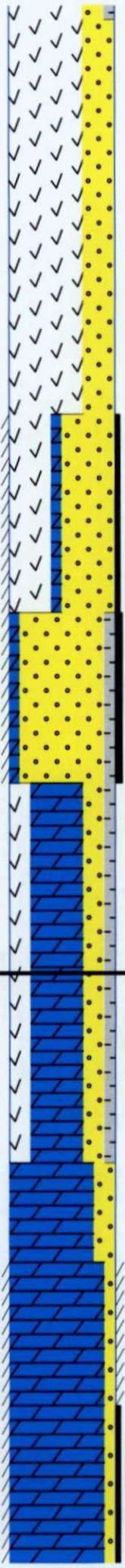
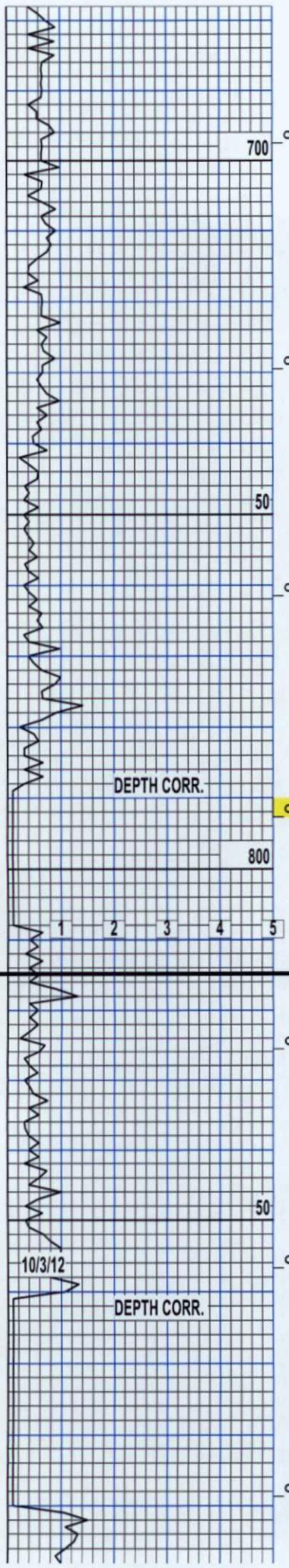
SH: RST RD, RD, RD/BRN,
 SFT TO FRM, SBLKY, ETHY
 SLTY

ANHY: OFF WHT, TRNSL,
 CLR, OPQ, VFXLN, MOD
 FRM TO FRM, SHLY IP

DOL: DKTN, TN, LTTN,
 VF TO MICXLN, MOD FRM
 TO FRM, CHLKY, ANHY IP,
 SHLY IP, MSTLY CLN

SS: CLR, TRNSL, AMBER,
 VF TO FGRN, MSTLY CONS,
 SM LSLY CONS, SBRND TO
 SBANG, WLL SRTD, ARG IP





SS: CLR, TRNSL, AMBER, VF TO FGFRN, MSTLY CONS W/ DOLO IP, SBRND TO SBANG, WLL SRTD, ARG IP

ANHY: OFF WHT, TRNSL, CLR, SL LTTN, VFXLN, MOD FRM TO FRM, DOLO IP, SNDY IP, CLN

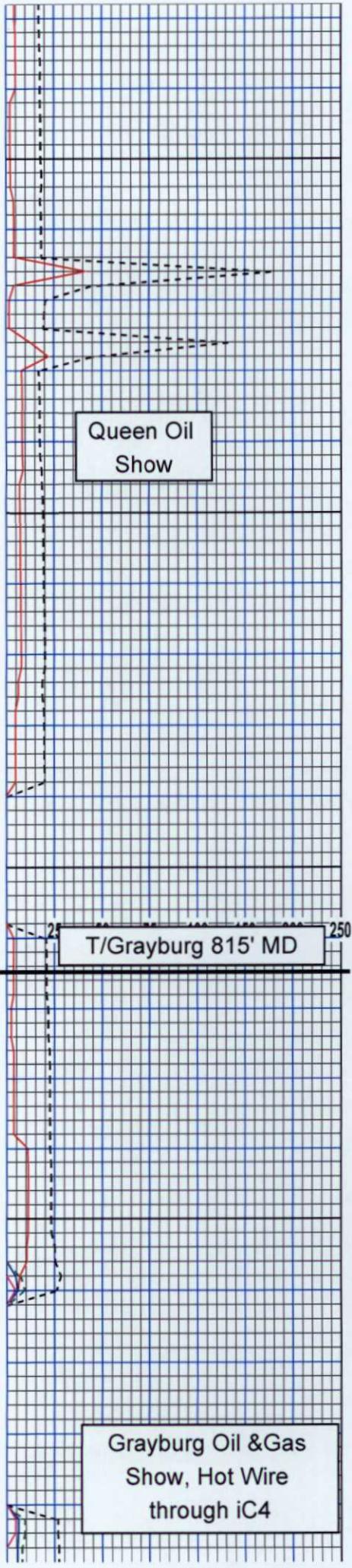
SS: CLR, TRNSL, AMBER, BFF, SM GRN, VFGRN, LSLY CONS W/ DOLO CMT, SBRND TO SBANG, ARG IP, 20% YL FLUOR, PR SLI STRMNG YL CUT, PR RES RNG, TR DKBRN OIL STN

SS: CLR, TRNSL, AMBER, BFF, VFGRN, LSLY CONS W/ DOLO CMT, SBRND TO SBANG, ARG IP, 30% YL FLUOR, PR SLI STRMNG YL CUT, PR RES RNG, TR DKBRN OIL STN

DOL: TN, LTTN, DKTN, VF TO MICKLN, FRM TO V FRM, SM CHLKY, ANHY IP, SNDY IP, SHLY IP, SM VGGY, TR FLUOR, TR CUT

DOL: LTBRN, DKTN, TN, LTTN, LTPNK, VFXLN, MOD FRM TO V FRM, SM CHLKY, ANHY IP, SNDY IP, TR FLUOR, TR CUT

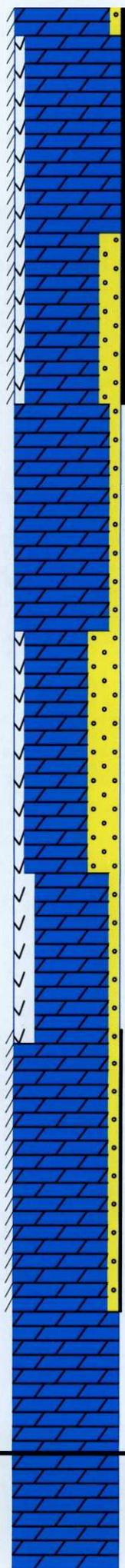
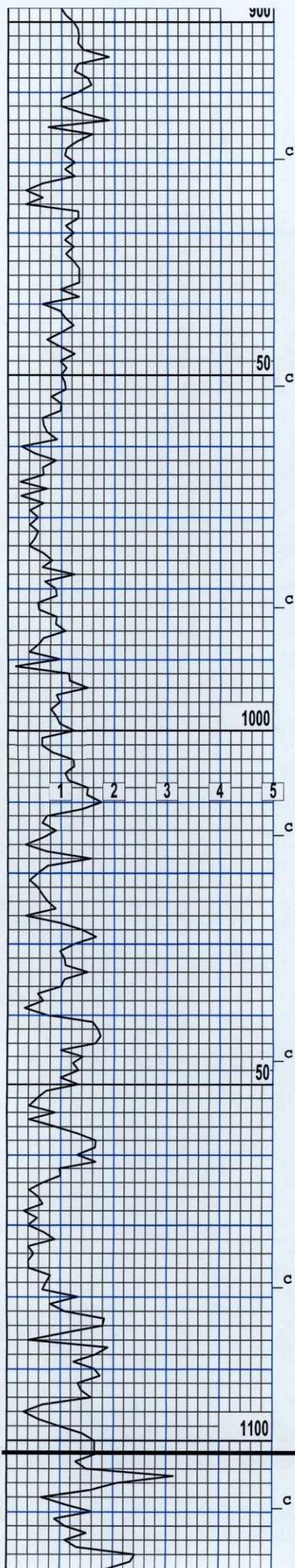
DOL: DKTN, TN, BFF, LTTN, OFF WHT, VF TO MICKLN, V FRM TO FRM, SM CHLKY, ANHY IP, SNDY IP, 20% YL FLUOR, PR FST STRMNG YL CUT, PR



Queen Oil Show

T/Grayburg 815' MD

Grayburg Oil & Gas Show, Hot Wire through iC4



RES RNG, TR BLDNG GAS
BUBBLE, TR DKBRN OIL
STN

DOL: DKTN, TN, BFF,
LTBRN, LTPNK, VF TO
MICXLN, FRM TO V FRM,
CHLKY IP, SNDY IP,
ANHY IP, SHLY IP, 30%
YL FLUOR, PR FST STRMNG
YL CUT, PR RES RNG, TR
GAS BUBBLE

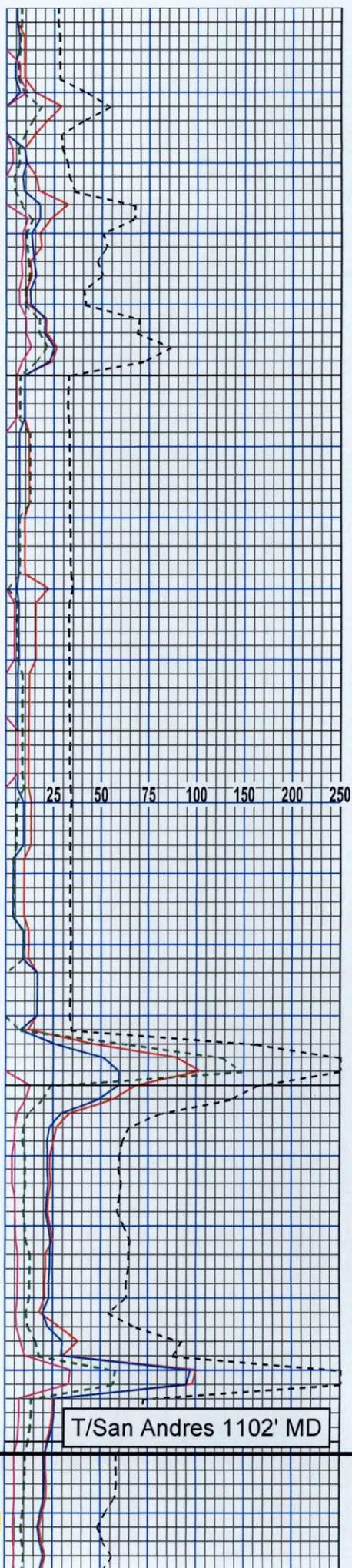
DOL: LTBRN, DKTN, TN,
LTTN, BFF, GRY, OFF WHT
VF TO FXLN, MOD FRM TO
MOD HD, SM DNS, CHLKY
IP, SNDY IP, TR FLUOR,
TR CUT

SS: CLR, LTGRY, TRNSL,
VF TO FGRN, WLL CONS/
W DOLO CMT, SBRND TO
SBANG, MOD SRTD, TR
FOSS

ANHY: OFF WHT, TRNSL,
FRSTD, VFXLN, FRM TO
V FRM, DOLO IP

DOL: DKTN, TN, LTTN,
OFF WHT, BFF, VF TO
MICXLN, MOD FRM TO
MOD HD, SM DNS, CHLKY
IP, ANHY IP, SNDY IP,
10% MED YL FLUOR, PR
SLI STRMNG YL CUT, PR
RES RNG, TR BLDNG GAS
BUBBLE

DOL: LTTN, OFF WHT, TN,
VF TO MICXLN, FRM TO
V FRM, CHLKY IP, SUCRO
IP, ANHY IP, SNDY IP,
10% MED YL FLUOR, PR MED
YL CUT, PR RES RNG



T/San Andres 1102' MD

Lime Rock Resources

Terry 14C #2 Daily Drilling Report Sec 14 T18S R26E

8/28/2016

Time Log of Operations						
Start Time	Dur (hr)	Cum Dur (hr)	End Time	Code 1	Code 2	Com
06:00	1.00	1.00	07:00	Run	Casing & Cement	Finished Running 10 Jts 13 3/8 - J55-54.50# Casing / Set Depth 425 ft.
07:00	0.50	1.50	07:30	Rig Down	Casing Crew	Circulate Casing / Rig Down Casing Crew.
07:30	1.00	2.50	08:30	Rig Up	Other	Rig Up Allied Cement Crew / Circulate Casing.
08:30	0.25	2.75	08:45	Safety meeting	.	Safety Meeting With Rig Crew & Cement Crew.
08:45	1.00	3.75	09:45	Cement	Casing	Cemented With Allied / Pumped 440 Sks Class C / Bumped Plug @ 09:36 Mst / Circulated 245 sks or 59 Bb's to Surface / Plug Held.
09:45	5.00	8.75	14:45	Waiting on cement	.	WOC / Rig Down Cementers.
14:45	3.25	12.00	18:00	Install	Wellhead	Cut Off 13 3/8 Casing / Weld On 13 3/8 Wellhead.
18:00	5.00	17.00	23:00	Nipple up/down diverter system	.	Nipple Up 2 Spools & Hydrill / Build New Flow Nipple/Picked Up D.C Function Tested Hydrill.
23:00	3.00	20.00	02:00	Pick up	BHA	Picked Up Directional Tools / Tested & Scibed Tools / Installed MWD & Tested.
02:00	1.00	21.00	03:00	Trip In Hole	BHA	Tripped in Stds D.C's From Derrick / Tested casing 600 Psi 30 Minutes (OK)
03:00	1.00	22.00	04:00	Drill cement/drill out cement/drill float & shoe	.	Drill Shoe Track (Tagged @ 378 ft)
04:00	2.00	24.00	06:00	Drilling	.	Drilled from 425 ft to 480 ft / Rop 27 ft hr / Full Returns

8/29/2016

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Code 1	Code 2	Com
06:00	6.00	6.00	12:00	Drilling	.	Drilled From 480 ft to 743 ft / Rop 43 Ft Hr / Full Returns / Had Oil Show In Samples @ 681 ft / Stop Drilling.
12:00	0.25	6.25	12:15	LUBRICATE RIG	.	Service Rig.
12:15	1.00	7.25	13:15	Circulate and Condition	.	Pumped 2 Hi Vis Sweeps to Surface.
13:15	1.00	8.25	14:15	Rig up	Casing Crew	Rig Up Bull Rogers Casing crew.
14:15	0.25	8.50	14:30	Safety meeting	.	Safety Meeting With Rig crew & Casing Crew.
14:30	2.00	10.50	16:30	Run	Casing & Cement	Ran 15 Jts 8 5/8 - 24#-J55 Casing Set Depth 630 ft.
16:30	1.00	11.50	17:30	Circulate and Condition	.	Circulate /Casing / Rig Down Casing Crew.
17:30	0.50	12.00	18:00	Condition mud & circulate	.	Circulate Casing.
18:00	1.00	13.00	19:00	Rig Up	Other	Rig Up Cement Crew.
19:00	0.25	13.25	19:15	Safety meeting	.	Safety Meeting With Rig Crew & Cement Crew.
19:15	0.25	13.50	19:30	Rig Up	Other	Install Cement Head.
19:30	1.00	14.50	20:30	Cement	Casing	Pumped 150 Sks C Lead + 200 sks C Tail / Bumped Plug @ 21:00 Mst / Plug Heeld / Circulated 86 Sks Or 37 Bb's.
20:30	6.00	20.50	02:30	Waiting on cement	.	WOC & Clean Pits / Lift Hydrill Set Slips /Cut Off 8 5/8 Casing/Weld On Slip On Collar,
02:30	3.50	24.00	06:00	Nipple up BOP	.	Nipple Up 2K Bop & Choke System

Lime Rock Resources

OCD Hearing Case 15487

November 9, 2016

Review of cost and economics of one surface casing string versus a short surface and intermediate casing string for a 4,600' Yeso well.
(2016 constant dollars, EIA price forecast)

Increased cost for one Yeso well per current OCD rule proposal: \$150,100 or 16%

Added Cost:

Rig, fuel, offsite cuttings disposal, water, mud, rentals	\$92,300
Supervision, trucking, pressure control, contract services	\$12,700
Cement services, bits, logging	\$25,600
Tangibles	\$19,500

Estimated development drilling well count for 1 year: 25

Total increased cost for 1 year: \$3,753,000

Estimated development drilling locations total: 381

Total Increased cost for life of project: \$57,188,000

Decrease (reduction) in annual well count based upon fixed budget: 4

Decrease (reduction) in lifetime well count based upon fixed budget: 61

Decrease in 15.2 year life of project: 2.4 years

Decrease in undiscounted cash flow due to annual well reduction: \$14,904,000

Decrease in undiscounted cash flow due to lifetime well reduction: \$227,286,000

Est decrease in NM tax and royalty revenue based on annual reduction: \$4,628,000

Est decrease in NM tax and royalty revenue based on lifetime reduction: \$70,577,000

As proposed, the new rule for running surface casings in the Roswell Artesian Water Basin does not offer an increased level of protection of public health and the environment, neither does it prevent the waste of oil and gas pursuant to the mandates of the Oil and Gas Act, it actually assures it.

