

ERIAN TERRY
GEOLOGICAL CONSULTANT
BOX #3265
Durango, Colorado

LIHVI OIL PROPERTIES INC.
BOLLER DAYTON OPERATOR

NAVAJO 2013 A-1

N. M. Section 11, Township 23 North, Range 15 West
San Juan County, New Mexico



Zoller & Bannenberg
2013-A-1

WELL HISTORY DATA:

COMPANY: Zoller & Bannenberg, Denver, Colorado

WELL: Navajo 2013-A-1

LOCATION: N. 1/4 (532' E/1/4 660' E/1/4) Section 11, Township
23 North, Range 15 West, NPM, San Juan County, N.M.

ELEVATION: 5439.5 feet ground. 5446 feet Kelly Lushing.

FIELD: Wildcat.

SPUD: August 5, 1964.

SURFACE CASING: 4 5/8" x 160' x 70 sacks.

COMPLETION DATE: August 23, 1964.

TOTAL DEPTH: Driller-1710. Ref. to Survey 1703.

INITIAL PRODUCTION: Dry and abandoned.

REVISIONS: None.

CORRECTION: 100 FT: 1704-1705 (Lower Callup).

LOGS: Schlumberger: 100, Formation Resistivity-Inductance/Caliper.

CONTRACTOR: Midland Oil Producers Inc., Midland, Texas.
Truster: Mr. Earl Allen.

GEOLOGIST: John Krauer, Lubbock.
Phil Hogan, El Paso.
Brian Kirby, Representing Midland.

PLUGGING DATA: Test plugged August 23, 1964 according to USHS instructions:

Plugs: 4550-ET 37 sacks.
3200-3300 25 sacks.
1250-1350 25 sacks.
350-450 25 sacks.
Surface Marker.



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The following formation tops are corrected to Schlumberger and measured from the Kelly Bushing:

FORMATION	DEPTH	ELEVATION
Pictured Cliffs	412	+5034
Lewis Shale	732	+4714
Mesaverde	1304	+4142
Point Lookout	3050	+2306
Hancos	3250	+2196
Gallup	4258	+1188
Lower Gallup	4600	+ 846
Gallup Sand	4610	+ 836
Sanastee	4653	+ 793
Total Depth	4705	

SAMPLE DESCRIPTION:

Samples were caught at 10' intervals from surface to 4450.

5' samples from 4450-Total depth. Miami's cut were turned over to the Four Corners Sample Out at the conclusion of the test.

Drilling samples, for analysis, indicated all massive sands above the lower Gallup to be non commercial.

Lower Gallup Description:

4595-4600 Sand, fg, interbedded w/ shale.
Siltstone, 10%, sandy, greenish gray.
4600-05 Siltst, gray-brn, shale, dark.
Trace sandstone.
4605-10 Siltst as above. Sand, mg, silty, clayey, glauconitic, sub rd. Pcs. Sand, clear.
4610-15 Sand, clear-frosted, sub rd, ang, glauconitic, clayey, med grn. Shale inclusions. No cut.
4615-20 Sand, same. Cleaning up. Trc. fluor.
4620-25 Sand, same, interspersed with shale.
Considerable bentonitic material. ? cut. Trc. fluor.
4625-35 Same.

Sanastee Description:

Lime, sandy, grayish brn, f xylm.



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DST #1 covering lower Gallup and Sanaskee. 4595-4705 (August 22, 1964).

Shut in 1 hour for initial and 1 hour for final BHP. Tool open 2 hours.

The blow ranged from strong to weak. Recovered 150' fluid (60' drilling mud, 60' slightly oil and gas cut thin watery mud, 30' muddy salt water with a slight scum of oil). Water checked out at 48,000 SFM. (SCD)

IF 118#-148#, ISIP 1800# BSIP 1486#, IW 2556# BH 2541#

The following data is taken from Schlumberger calculations using $\mu_w = .025$ at 127°:

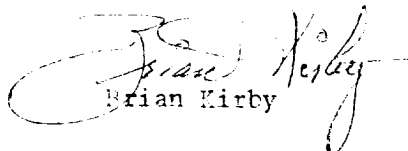
<u>Depth</u>	<u>Porosity</u>	<u>SW</u>
4601-03	6%	100%
4603-08	Shale.	
4608-11	3 1/4%	100%
4611-18	9%	92%
4618-22	2%	100%

The following people were contacted and gave their Companies ok to plug the subject test: Skelly, C. C. Steitler, Tidewater, Phil Logan, Sunry, Bob Maynard, Humble, John Bremer.

CONCLUSION & RECOMMENDATION:

Sample, log, and DST analysis indicated the lower Gallup in the subject test to be non commercial. No other zones had commercial possibilities. The only recommendation was to plug and abandon.

Respectfully Submitted,


Brian Kirby



Zoller & Naumburg
2013-A-1

Time Log: 10' Time.

0-1000' ave. 1 in per foot.

1000-1100	15-17-15-12-16-25-20-17-13-15
1200	13-15-24-15-18-20-20-20-23-20
1300	17-23-23-26-19-30-30-30-21-25
1400	12-17-18-25-21-25-42-17-17-18
1500	15-13-14-13-13-13-14-14-11-12
1600	14-15-10-12-13-10-15-15-15-17
1700	20-19-23-21-22-30-40-37-38-33
1800	32-33-30-51-46-75-39-47-40-40
1900	57-61-72-40-57-58-60-48-68-75
2000	66-66-45-22-34-30-35-25-27-27
2100	23-20-20-15-30-35-30-23-26-32
2200	32-35-35-28-30-30-22-32-15-18
2300	23-22-23-25-24-28-15-24-24-30
2400	22-22-25-29-17-35-25-21-21-21
2500	23-22-23-33-28-27-17-20-25-24
2600	23-22-30-23-20-20-30-38-25-26
2700	32-20-15-15-17-27-32-30-40-22
2800	30-22-23-23-37-47-40-37-32-15
2900	Glock Stopped.
3000	17-14-19-20-15-14-15-14-13-8
3100	10-12-15-19-25-19-15-15-18-15
3200	15-20-28-24-19-23-17-19-26-25
3300	24-24-22-25-17-15-16-17-20-21
3400	25-25-23-22-26-28-30-27-28-29
3500	28-27-30-28-32-30-30-30-31-31
3600	38-27-30-27-34-30-24-23-24-25
3700	26-24-21-24-20-24-29-26-25-41
3800	35-46-34-31-33-37-37-34-40-49
3900	40-30-25-30-42-37-38-24-20-26
4000	30-30-32-37-41-44-40-44-44-35
4100	33-34-25-29-32-30-29-32-32-29
4200	27-37-41-49-41-35-38-42-47-43
4300	37-43-47-62-47-45-51-50-43-55
4400	50-67-71-43-43-37-40-40-42-37
4500	33-35-58-53-44-50-50-46-44-45
4600	50-40-61-35-62-45-46-45-53-54
4700	72-70-57-30-63-64-45-43-47-47
4710	47

