

STATE JACKSON #1

FORMATION	TOP	BOTTOM	REMARKS
From top of rotary drive bushing to top 13-3/8" OD casing	0	19	
Red bed and shells	19	504	1/8" @ 250
Red bed, shale and shells	504	650	
Anhydrite	650	665	St. @ 665
<u>Set 13-3/8" OD casing @ 665 w/1600 sag</u> <u>6% gel. 200 mesh. Circ. 5 sag.</u>			
Casing bailed dry and remained dry 1 hr.			
Tested 13-3/8" OD casing w/1000# 30 min. no break, before or after.			
Anhydrite and red bed	665	1126	1/4" @ 922
Red bed, salt and shells	1126	1460	3/4" @ 1240
Red bed and salt	1460	1630	1" @ 1641
Anhydrite and shells	1630	1700	
Shells and red bed	1700	1833	
Red bed, shells and anhydrite	1833	1953	1/4" @ 1895
Anhydrite and shells	1953	2025	
Lime and anhydrite	2025	2075	1" @ 2075
Anhydrite and red bed	2075	2155	
Anhydrite and shale	2155	2205	1" @ 2180
Anhydrite, lime and red bed	2205	2295	
Anhydrite and red bed	2295	2348	
Anhydrite, lime and red bed	2348	2420	1/4" @ 2357, 1/2" @ 2409
Anhydrite, shale and red bed	2420	2449	
Lime	2449	2556	3/4" @ 2483, 3/4" @ 2517
Anhydrite, lime and dolomite	2556	2614	1/4" @ 2614
Lime and sand	2614	2670	
Sand and dolomite	2670	2725	1" @ 2693
Lime and dolomite	2725	2779	3/4" @ 2749
Lime	2779	2980	3/4" @ 2935
Dolomite and sandy shale	2980	3012	
Lime and sand	3012	3062	1/2" @ 3045
Dolomite and sand	3062	3103	
Dolomite	3103	3126	
Dolomite and sand	3126	3171	
<u>Top of Glorietta @ 3130', 17' low</u> <u>to C. L. O'Brien "B" #1.</u>			
Dolomite	3171	3188	
Anhydrite and dolomite	3188	3246	3/4" @ 3232
Dolomite and sand	3246	3290	3/4" @ 3290
Dolomite, anhydrite and salt	3290	3375	
Anhydrite, sand and shale	3375	3408	
Anhydrite and dolomite	3408	3415	
Halliburton ran calipers	665	3410	
<u>Set 9-5/8" OD casing @ 3415 w/1870 sag</u> <u>6% gel. 435 sag wallite, and 150 sag</u> <u>neat. No cement circ. WOC 16 hrs.</u>			
Halliburton ran Temp. Survey	100	3360	Approx. top of cement 770'.
Tested 9-5/8" OD casing w/1600# 30 min. no break before or after.			
Anhydrite, dolomite and lime	3415	3517	
Anhydrite and shale	3517	3690	1/4" @ 3625
Lime and shale	3690	3855	1/2" @ 3849
Anhydrite, dolomite and shale	3855	3990	
Anhydrite and shale	3990	4097	

Shale and lime	4097	4240
Anhydrite, dolomite and shale	4240	4359
Anhydrite, sand and shale	4359	4415
Anhydrite and shale	4415	4445
Lime	4445	4555
Anhydrite, dolomite and sandy lime	4555	4660
Anhydrite and dolomite	4660	4745
Lime	4745	4845
Anhydrite, dolomite and shale	4845	4919
Anhydrite and shale	4919	5090
Lime	5090	5204
Anhydrite and shale	5204	5312
Lime, shale and anhydrite	5312	5360
Anhydrite and shale	5360	5390
Shale and shells	5390	5426
Anhydrite and shale	5426	5484
Dolomite and shale	5484	5503
Anhydrite and shale	5503	5672
Lime and shale	5672	5715
Shale and lime streaks	5715	5765
Anhydrite and shale	5765	5777
Sand and shale	5777	5795
Shale and lime	5795	5827
Anhydrite and shale	5827	6071
Shale and dolomite	6071	6122
Lime and shale	6122	6140
Dolomite	6140	6169

4285
4390

1° @ 4628

1° @ 4750

1° @ 4910

1° @ 5075

3/4° @ 5188

3/4° @ 5344

3/4° @ 5475

1-1/4° @ 5655

1-1/2° @ 5760

1-1/4° @ 5845, 1-1/2° @ 6008,

Top Permo Penn. 6160', 18' low to
C. L. O'Brien "B" #1.

Lime	6169	6188
Lime and shale	6188	6206
Shale, dolomite and chert	6206	6236
Lime	6236	6260
Anhydrite and lime	6260	6295
Lime	6295	6351
Lime and shale	6351	6466
Lime	6466	6724

Drill Stem Test	6706	6724
-----------------	------	------

3/4° @ 6700, Break in drlg. time 8-10 to 3-5 MPF, 6714-6724 trace to 10% vuggy porosity and trace stain.

Permo Penn. 2 packers, 2 hrs. 5/8" BHC and 1" SC, No WC, gas 3 min. Est. 679 MCF/24 hrs. salt water 1 hr. 25 min. w/slight show oil, flowed to pits 35 min. SFP no gauge BHFP 490-950#, 15 min. S-I BHP 2700#, HH 3700-3800#.

Lime	6724	6824
------	------	------

1° @ 6775, drlg. break 6803-6824, 10-12 MPF to 6-8 MPF, trace pin point porosity trace stain.

Drill Stem Test	6800	6824
-----------------	------	------

Permo Penn. 2 packers, 2-1/2 hrs. 5/8" BHC and 1" SC, No WC, Rec. 90' drlg. mud, no shows, BHFP 150#, 15 min S-I BHP 600#, HH 3650-3700#.

Lime	6824	6871
Shale and lime	6871	7024
Chert and hard sand	7024	7034

1/2° @ 6843

1° @ 6970

Top Mississippian 7030', 3' low to
C. L. O'Brien "B" #1.

Chert and junk	7034	7038
Chert and lime	7038	7207
Lime and shale	7207	7218
Lime, shale and chert	7218	7240
Lime and shale	7240	7258
Lime and sandy shale	7258	7275
Lime, shale and sand streaks	7275	7292
and	7292	7294

1° @ 7177

Line, shale and sand	7294	7304	11 to 6-8 MPF @ 7306
Shale and sand	7304	7309	
			<u>Top Devonian 7306'</u> , 50' low to C. L. O'Brien "B" #1.
6-3/4" Diamond Core	7309	7314	Rec. 3' Finely crystalline to medium crystalline gray to brown dolomite bleeding gas. 1 - 1" vugg, several small vuggs, 20% vuggy fractured inter-crystalline porosity, 40% blue fluorescence 20% yellow fluorescence very good odor, bottom 1" saturated.
Drill Stem Test	7301	7314	Devonian, 2 packers, 1 hr. 5/8" BHC and 1" SC, No WC, Rec. 390' gas and salt water out drlg mud, 5760' gas out salt water, no oil, BHFP 1300-2780#, 15 min. S-I BHP 2800#, HH 4000-3880#.
6-3/4" Diamond Core	7314	7319	Rec. 1' Finely crystalline gray to brown siliceous dolomite, trace to fractured and vuggy porosity, 10% blue fluorescence, trace yellow fluorescence.
			Started losing mud @ 7319', 2/3 Circ.
6-3/4" Diamond Core	7319	7322	Rec. 1' Finely crystalline gray dolomite w/scattered vuggs thru-out, no fluorescence.
6-3/4" Diamond Core	7322	7329	Rec. 6-1/4' 5' finely crystalline gray dolomite w/trace small vuggy porosity, few fractures, 10% blue fluorescence, 1-1/4' gray waxy shale.
6-3/4" Diamond Core	7329	7342	Rec. 13' 2-1/2' gray waxy shale, 7-1/2' medium crystalline gray to brown dolomite, trace to 10% inter-crystalline porosity, 20% yellow fluorescence, trace blue fluorescence 3' finely crystalline to very finely crystalline gray very siliceous dolomite w/gray opaque chert inclusions.
Drill Stem Test	7330	7342	Devonian, 2 packers, 2 hrs. 5/8" BHC and 1" SC, No WC, Rec. 90' drlg. mud, 600' sulphur water, no oil or gas, BHFP 0-400#, 15 min. S-I BHP 2790#, HH 3850-3750#.
Dolomite, shale and lime	7342	7351	Drlg. break 11-9 MPF @ 7345'. Gas kick by Rotary Engineers.
Lime and shale	7351	7356	
Dolomite, shale and lime	7356	7364	
Shale and dolomite	7364	7379	
Drill Stem Test	7350	7379	Devonian, 2 packers, 2-1/2 hrs. 5/8" BHC and 1" SC, No WC, Rec. 180' drlg. mud, 930' sulphur water, no show oil or gas, BHFP 90-570#, 15 min. S-I BHP 2435#, HH 3900-3720#
Shale and dolomite	7379	7418	
TOTAL DEPTH		7418	

Sheet #4

Lane Wells ran Gamma Ray and
Neutron log

0 7419

60 sack cement

7418 7260

50 sack cement

6700 6569

50 sack cement

3500 3370

Specialty Shooting Co. shot
9-5/8" OD casing.

741

w/3 qts. Pulled 725' of 9-5/8" OD

15 sack cement

15 0

Install monument 4" x 4"

Plugging commenced 2/24/51

Plugging completed 2/28/51

New Mexico School of Mines
STATE BUREAU OF MINES AND MINERAL RESOURCES
Socorro, New Mexico

COUNTY Chaves
FIELD Twin Lakes
COMPANY Magnolia Pet. Co.
LEASE State Jackson
LOCATION (1/4) SW/4

WELL LOG DIVISION

CASING RECORD
Diam. in Bottom
15-1/8 665
9-1/8 3415
ELEVATION 3961 FEET
INITIAL DAILY PRO.
Open bbls. Oil
Open cu. ft. Gas
Tbg. bbls. Oil
Tbg. cu. ft. Gas

SEC. 36 T. 8S R. 28E
660 feet from south line and
1930 feet from west line in 36
COMMENCED 12-27-50
COMPLETED 2-28-51
ABANDONED
REMARKS Rotary tool
0-7418

FORMATION	BOTTOM, FEET	
Red bed and shells	504	Lime 4555
Red bed, shale and shell	650	Anhy., dolomite and sandy lime 4660
Anhydrite	665	Anhydrite & dolomite 4745
Anhydrite and red bed	1126	Lime 4845
Red bed, salt and shells	1160	Anhy. dolomite & shale 4919
Red bed and salt	1330	Anhy. and shale 5090
Anhydrite and shells	1700	Lime 5204
Shells and red bed	1833	Anhydrite and shale 5312
Red bed, shells and anhydrite	1953	Lime, shale, & anhy. 5360
Anhydrite and shells	2025	Anhydrite and shale 5390
Lime and anhydrite	2075	Shale and shells 5426
Anhydrite and red bed	2155	Anhydrite and shale 5484
Anhydrite and shale	2205	Dolomite and shale 5503
Anhydrite, lime and red bed	2295	Anhydrite and shale 5672
Anhydrite and red bed	2348	Lime and shale 5715
Anhydrite, lime and red bed	2420	Shale and lime streaks 5765
Anhydrite, shale and red bed	2449	Anhydrite and shale 5777
Lime	2556	Sand and shale 5795
Anhydrite, lime and dolomite	2614	Shale and lime 5827
Lime and sand	2670	Anhydrite and shale 6071
Sand and dolomite	2725	Shale and dolomite 6122
Lime and dolomite	2779	Lime and shale 6140
Lime	2980	Dolomite 6169
Dolomite and sandy shale	3012	Lime 6188
Lime and sand	3062	Lime and shale 6208
Dolomite and sand	3103	Shale, dolomite and chert 6236
Dolomite	3126	Lime 6260
Dolomite and sand	3171	Anhydrite and lime 6295
Dolomite	3188	Lime 6351
Anhydrite and dolomite	3246	Lime and shale 6466
Dolomite and sand	3290	Lime 6724
Dolomite, anhydrite, salt	3375	Lime 6824
Anhydrite, sand and shale	3408	Lime 6871
Anhydrite and dolomite	3415	Shale and lime 7024
Anhy., dolomite, lime	3517	Chert and hard sand 7034
Anhydrite and shale	3690	Chert and junk 7038
Lime and shale	3855	Chert and lime 7207
Anhydrite, dolomite, shale	3990	Lime and shale 7218
Anhydrite and shale	4097	Lime, shale and chert 7240
Shale and lime	4240	Lime and shale 7258
Anhy. dolomite and shale	4359	Lime and sandy shale 7275
Anhydrite, sand and shale	4415	Lime, shale and sand streaks 7292
Anhydrite and shale	4445	

LOG NO. 6442 cont.

Sand	7294
Lime, shale and sand	7304
Shale and sand	7309
Dolomite, shale and lime	7351
Lime and shale	7356
Dolomite, shale and lime	7364
Shale and dolomite	7379
Shale and dolomite T.D.	7418

GEOLOGIC TOPS

T. Anhydrite	650
T. San Andres	1960
T. Glorieta	3130
T. Abo	5400
T. Pennsylvanian	6160
T. Mississippian	7030
T. Devonian	7306
T. Yeso	3220

DEVIATION SURVEY

Degree	Depth	Degree	Depth
1/8	250	3/4	6700
St.	665	1	6775
1/4	922	1/2	6843
3/4	1240	1	6970
1	1641	1	7177
1/4	1895		
1	2075		
1	2180		
1/4	2357		
1/2	2409		
3/4	2483		
3/4	2517		
1/4	2614		
1	2693		
3/4	2749		
3/4	2935		
1/2	3045		
3/4	3232		
3/4	3290		
1/4	3625		
1/2	3849		
1/2	4285		
St.	4390		
1	4628		
1	4750		
1	4910		
1	5075		
3/4	5188		
3/4	5344		
3/4	5475		
1-1/4	5655		
1-1/2	5760		
1-1/4	5845		
1-1/2	6008		

CORE REPORT

7309	7314	6-3/4" Dia. core Rec. 3'
		finely crystalline to medium crystalline gray to brown dolomite bleeding gas. 1-1" vuggy, several small vuggs, 20% vuggy fractured inter-crystalline porosity, 40% blue fluorescence 20% yellow fluorescence very good odor, bottom 1' saturated.
7314	7319	6-3/4" Dia. core Rec. 1' Finely crystalline gray to brown siliceous dolomite, trace to fractured and vuggy porosity, 10% blue fluorescence, trace yellow fluorescence.
7319	7322	6-3/4" Dia. core Rec. 1' finely crystalline gray dolomite w/ scattered vuggs throughout, no fluorescence.
7322	7329	6-3/4" Dia. core Rec. 6-1/4' 5' finely crystalline gray dolomite w/ trace small vuggy porosity, few fractures 10% blue fluorescence, 1-1/4' gray waxy shale.
7329	7342	6-3/4" Dia. core Rec. 13' gray waxy shale 2-1/2', 7-1/2' medium crystalline gray to brown dolomite, trace to 10% inter-crystalline porosity, 20% yellow fluorescence, trace blue fluorescence, 3' finely crystalline to very finely crystalline gray very siliceous dolomite w/ gray opaque chert inclusions.