

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION

New Well Temporary Abandon Work-Over Deepen Plug Back Same Reservoir Different Reservoir Oil Gas Dry

DESCRIPTION OF WELL AND LEASE

Operator: El Paso Natural Gas Company Address & Phone No. 2 N. Nevada, Colorado Springs, CO 80944 719-520-4533
 Federal, State or Indian Lease Number or name of lessor if fee lease: State Well Number: 1-20 Field & Reservoir: NA

Location: 1300' ENL + 1420' FEL County: Pinal

Sec. Township-Range or Block & Survey: Sec 20, T7S, R8E G. + S. R. M.

Date spudded: 7/10/05 Date total depth reached: 8/4/05 Date completed, ready to produce: NA Elevation (DF, KB, RT or Gr.): 1525 Gr feet Elevation of casing head flange: NA feet

Total depth: 3346 HB 3341 GL P.B.T.D.: NA Single, dual, or triple completion?: NA If this is a dual or triple completion furnish separate report for each completion

Producing interval(s) for this completion: NA Rotary tools used (interval): 0-33 Cable tools used (interval): —

Was this well directionally drilled?: No Was directional survey made?: Yes Was copy of directional survey filed?: Attached Date filed: 8/5/05 + 7/

Type of electric or other logs run (check logs filed with the Commission): Lithology Density/Compensated Neutron, Lateral Log, Gamma Ray Spectroscopy Date filed: 8/5/05 + 7/
Schlumberger → Induction-Gamma, Electric-Gamma-Temp CASING RECORD Caliper
Wellco →

Casing (report all strings set in well -- conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amount pulled
<u>Conductor</u>	<u>12 1/4"</u>	<u>9 5/8"</u>	<u>36 #</u>	<u>90</u>	<u>28</u>	<u>0</u>
<u>Surface</u>	<u>8 3/4"</u>	<u>7"</u>	<u>23 #</u>	<u>1815'</u>	<u>310</u>	<u>0</u>

TUBING RECORD

LINER RECORD

Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth interval	Amount & kind of material used	Depth interval

INITIAL PRODUCTION

Date of first production: <u>NA</u>		Producing method (indicate if flowing, gas lift or pumping -- if pumping, show size & type of pump)					
Date of test	Hours tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity *API	
Tubing pressure	Casing pressure	Calculated rate of production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas - oil ratio	

Disposition of gas (state whether vented, used for fuel or sold)

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Manager Facility Planning of the El Paso Natural Gas Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date: 8-18-2005 Signature: [Signature]

Permit No. <u>926</u> Mail completed form to: Oil and Gas Program Administrator Arizona Geological Survey 416 W. Congress, #100 Tucson, AZ 85701	STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log File One Copy Form No. 4
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DETAIL OF FORMATIONS PENETRATED

FORMATION	TOP	BOTTOM	DESCRIPTION*
Conglomerate	0'	1470'	- Coarse grained quartz + matrix igneous conglomerate with clay and shale intervals
Silt + Sand	1470'	1570'	- Gray siltstone with milky sub rounded quartz sand
Picacho Salt	1570'	3014'	Halite with siltstone and brown clay intervals Cored: 2310'-2329' 2404'-2423' 2500'-2519.5' 2600'-2620' 2700'-2726' 2884'-2904' Core log + photos attached
Picacho Anhydrite	3014'	3316'	Anhydrite, milky white with minor gray and red siltstones

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the Oil and Gas Program Administrator, Arizona Geological Survey, 416 W. Congress #100, Tucson, AZ 85701 not later than thirty days after completion pursuant to A.A.C. R12-7-121.

PLUGGING RECORD

719-520-4533

Operator <i>El Paso Natural Gas Company</i>		Address & Phone number <i>2 N. Nevada, Colorado Springs CO 80944</i>	
Federal, State, or Indian Lease No. or lessor's name if fee lease <i>State</i>		Well No. <i>1-11</i>	Field & Reservoir <i>NA</i>
Location of Well <i>1300' FNL + 1420 FEL</i>		Sec - Twp - Rge <i>Sec 20-T7S-R8E</i>	County <i>Pinal</i>
Application to drill this well was filed in name of <i>El Paso Natural Gas Co</i>	Has this well ever produced oil or gas? <i>No</i>	Character of well at completion (initial production) Oil (bbls/day) _____ Gas (MCF/day) _____ Dry? <input checked="" type="checkbox"/>	
Date plugged <i>8-6-05</i>	Total depth <i>3346' HB</i>	Amount well producing when plugged: Oil (bbls/day) _____ Gas (MCF/day) _____ Water (bbls/day) _____	
Name of each formation containing oil or gas. Indicate which formation open to wellbore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount of cement

CASING RECORD

Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, etc.)	Packers and shoes
<i>9 5/8"</i>	<i>90'</i>	<i>1' cut</i>	<i>89'</i>		
<i>7"</i>	<i>1815'</i>	<i>1' cut</i>	<i>1814'</i>		

Was well filled with heavy drilling mud, according to regulations? *Yes*

Indicate deepest formation containing fresh water _____

NAME AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE

Name	Address	Direction from this well

In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.

Use reverse side for additional detail

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the *Manager, Facility Planning* of the *El Paso Natural Gas* (company) and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date *8-18-2005*

Signature *[Signature]*

Permit No. <u><i>926</i></u> Mail completed form to: Oil and Gas Program Administrator Arizona Geological Survey 416 W. Congress, #100 Tucson, AZ 85701-1315	STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Plugging Record File One Copy Form No. 10
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Core Log

El Paso Natural Gas Company
 State #1-20
 Location: 1,300' FNL, 1,420' FEL
 Section 20, T7S, R8E
 Pinal County, Arizona

Ground Level Elevation = 1525'
 Spud Date July 10, 2005
 Completion Date: August 6, 2005

926

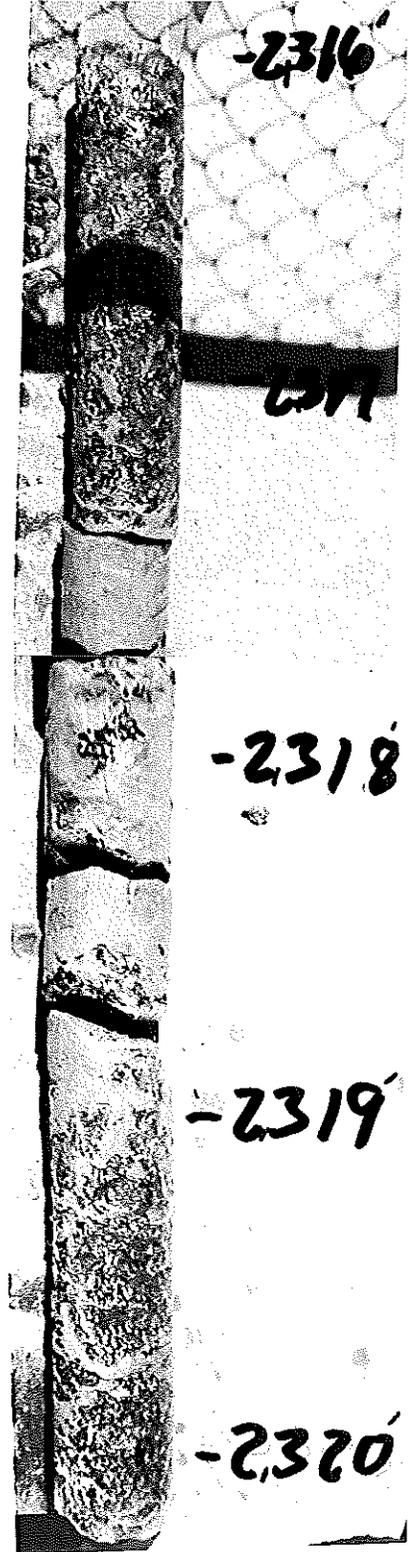
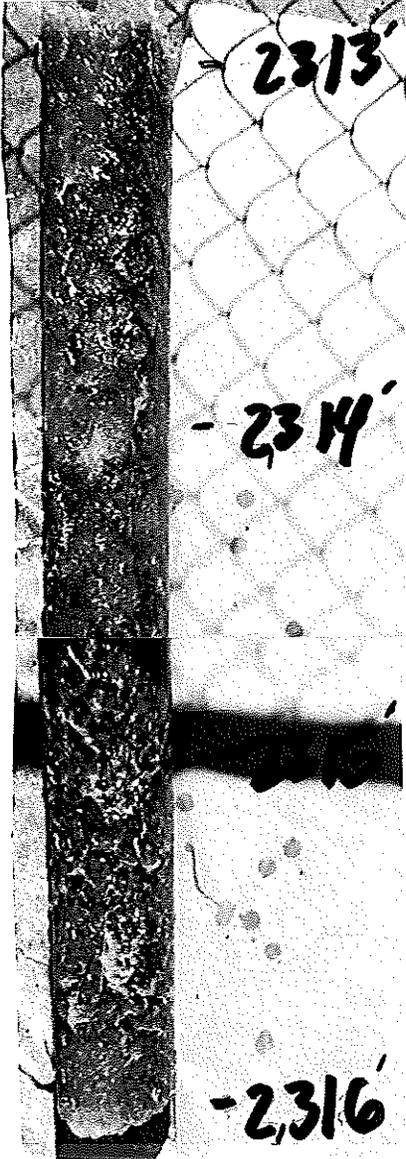
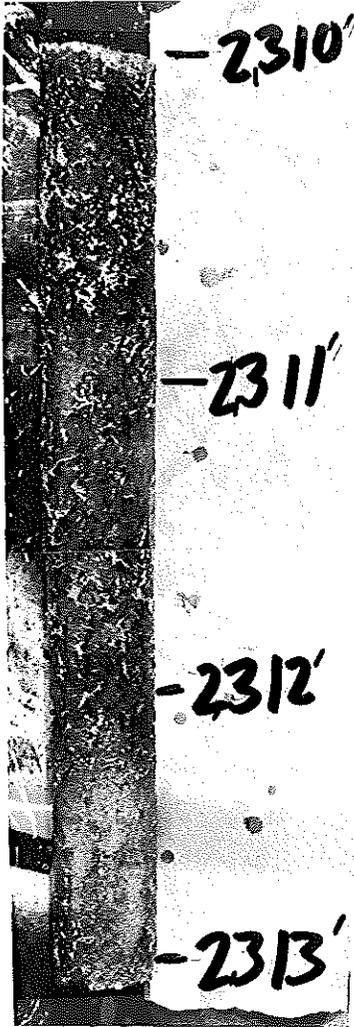
Core #	Respec Shipping Tube #	EPNG Retained Box #	Top	Base	Description
1	1		2,310.0	2,313.0	Crystalline (3/8' to 5/8") Salt with inter crystalline brown clay stone
1	2		2,313.0	2,316.0	Crystalline (3/8' to 5/8") Salt with inter crystalline brown clay stone
1	3		2,316.0	2,320.0	Crystalline Salt with clay stone & halite layer from 2,317.5' to 2,319'
1	4		2,320.0	2,323.0	Crystalline (3/8' to 5/8") Salt with inter crystalline brown clay stone
1	5		2,323.0	2,326.0	Crystalline (3/8' to 5/8") Salt with inter crystalline brown clay stone
1	6		2,326.0	2,329.0	Crystalline Salt with clay stone & halite masses from 2,326' to 2,329'
2		1	2,404.0	2,405.0	Clay stone with crystalline salt inclusions
2	7		2,405.0	2,408.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
2		1	2,408.0	2,409.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
2	8		2,409.0	2,412.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
2	9		2,412.0	2,414.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
2	10		2,414.0	2,417.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
2	11		2,417.0	2,420.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
2	12		2,420.0	2,423.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3		1	2,500.0	2,501.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3	13		2,501.5	2,504.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3	14		2,504.0	2,507.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3		2	2,507.0	2,508.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3	15		2,508.5	2,511.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3		2	2,511.0	2,512.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3	16		2,512.0	2,514.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3		2	2,514.5	2,515.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3	17		2,515.0	2,518.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3		2	2,518.0	2,519.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
3		3	2,519.0	2,519.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
4		3	2,600.0	2,602.0	Crystalline (3/8' to 3/4") Salt with inter crystalline clay stone
4	18		2,602.0	2,605.0	Crystalline Salt with inter crystalline clay stone, pure from 2604.5'
4		GWG	2,605.0	2,605.5	Pure clear Salt with 1"+ grains
4		4	2,605.5	2,607.5	Clay stone with halite inclusions
4		3	2,607.5	2,608.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
4	19		2,608.0	2,610.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
4	20		2,610.0	2,612.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
4	21		2,612.5	2,615.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
4		4	2,615.0	2,616.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
4		5	2,616.0	2,617.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
4		4	2,617.5	2,618.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
4	29		2,618.5	2,620.0	Brown clay stone bed
5		6	2,700.0	2,702.0	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
5		6	2,702.0	2,703.0	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
5	22		2,703.0	2,706.0	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
5	23		2,706.0	2,709.0	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
5		7	2,709.0	2,710.0	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
5		7	2,710.0	2,711.5	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
5		8	2,711.5	2,713.0	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
5	24		2,713.0	2,716.0	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone

926

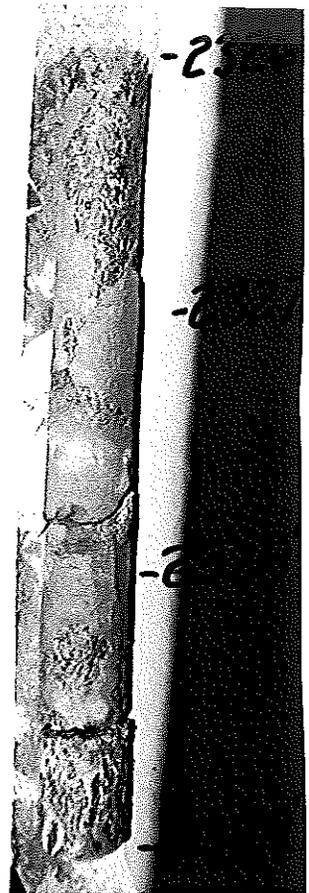
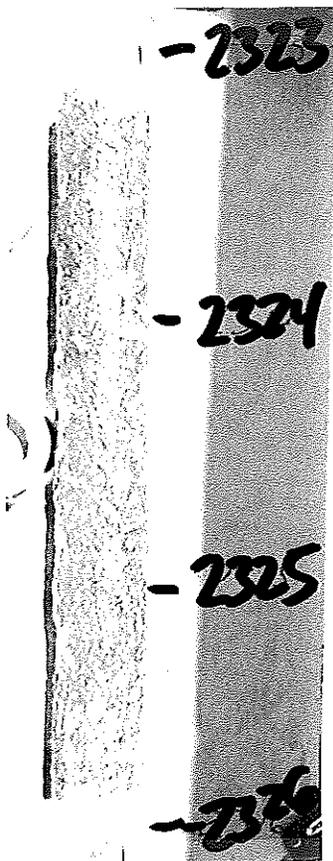
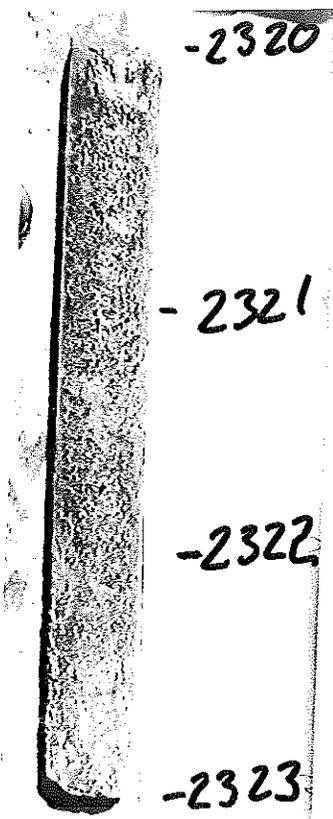
5		8	2,716.	2,716.5	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
5	25		2,716.5	2,719.0	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
5		8	2,719.0	2,720.0	Crystalline (3/8" to 5/8") Salt with inter crystalline brown clay stone
6		8	2,884.0	2,885.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
6		9	2,885.0	2,886.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
6		9	2,886.0	2,887.0	Crystalline (3/8" to 3/4") Salt with a clay stringer at 2,886.5'
6	26		2,887.0	2,890.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
6	27		2,890.0	2,893.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
6		9	2,893.0	2,893.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
6		9	2,893.5	2,895.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
6		10	2,895.5	2,896.5	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
6		10	2,896.5	2,898.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
6	28		2,898.0	2,901.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone
6		11	2,901.0	2,904.0	Crystalline (3/8" to 3/4") Salt with inter crystalline brown clay stone

Core Photo Log
El Paso Natural Gas Company
State #1-20
2,310' - 2,320'

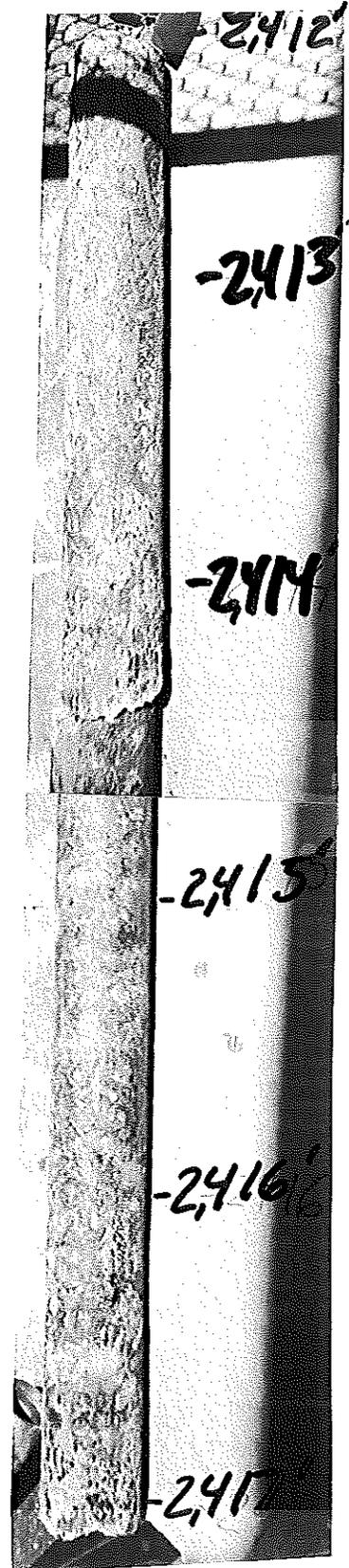
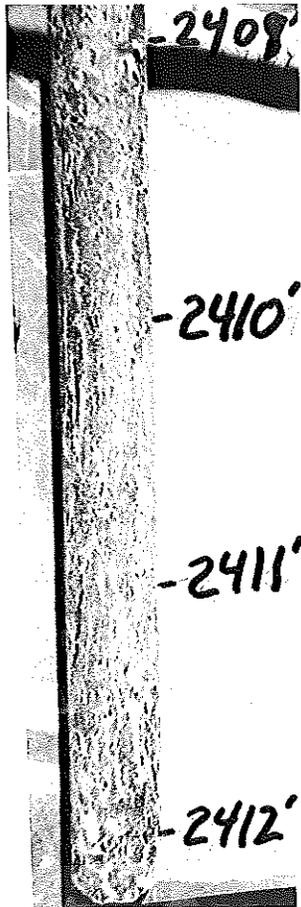
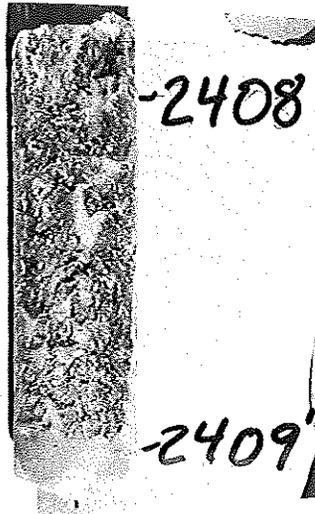
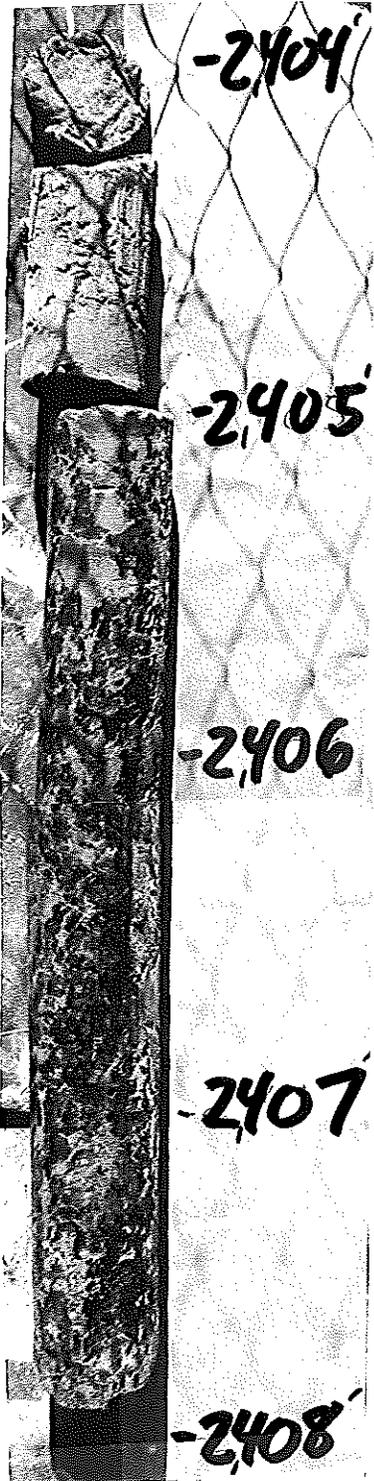
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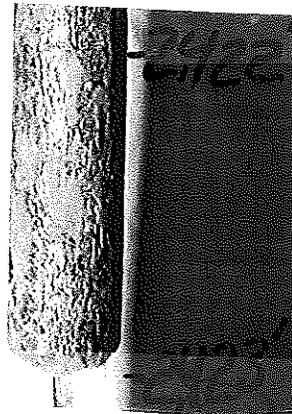
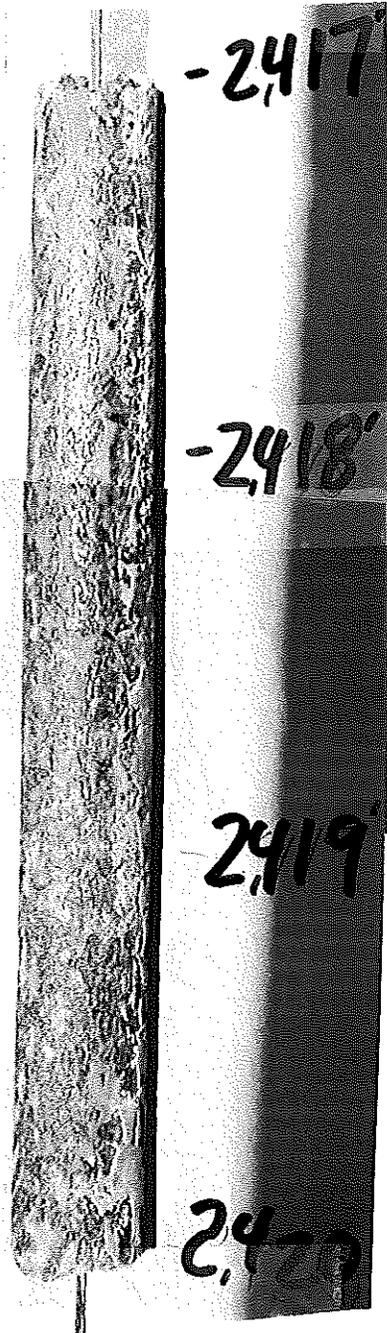
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El Paso Natural Gas Company
State #1-20
2,320' - 2,329'



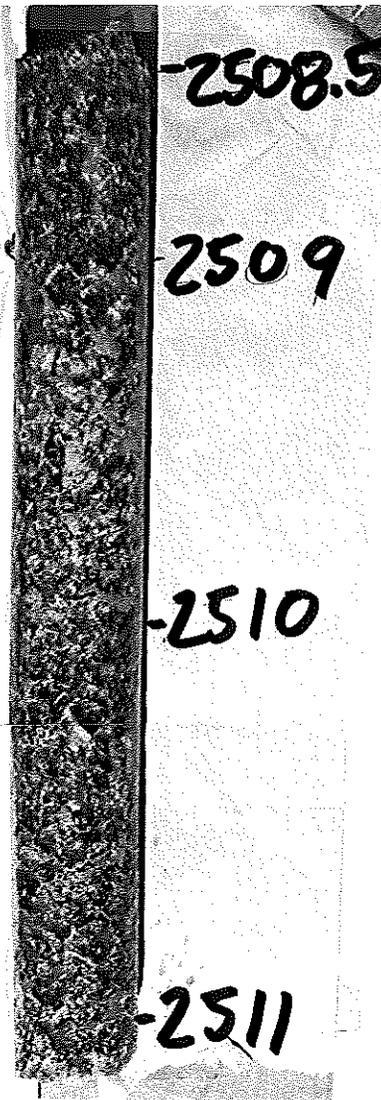
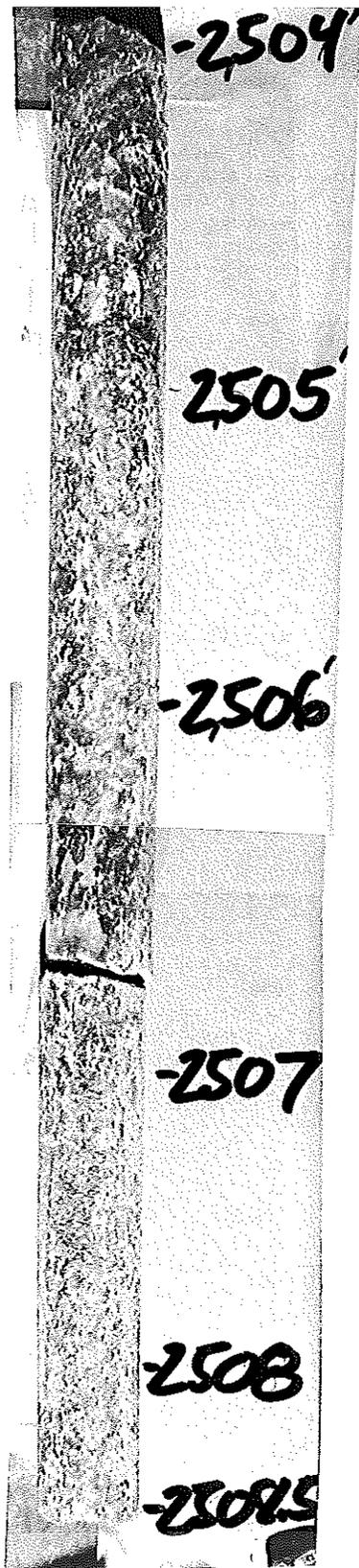
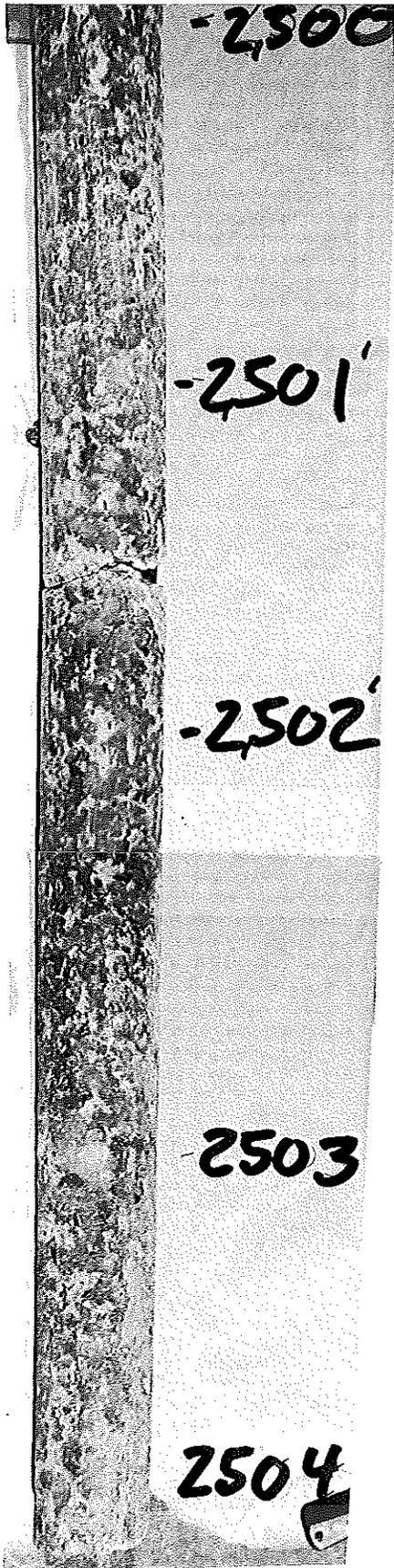
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El Paso Natural Gas Company
State #1-20
2,404' - 2,417'



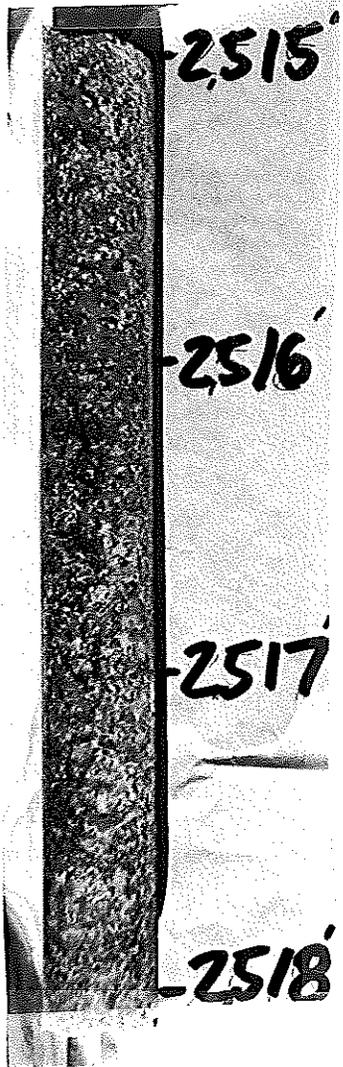
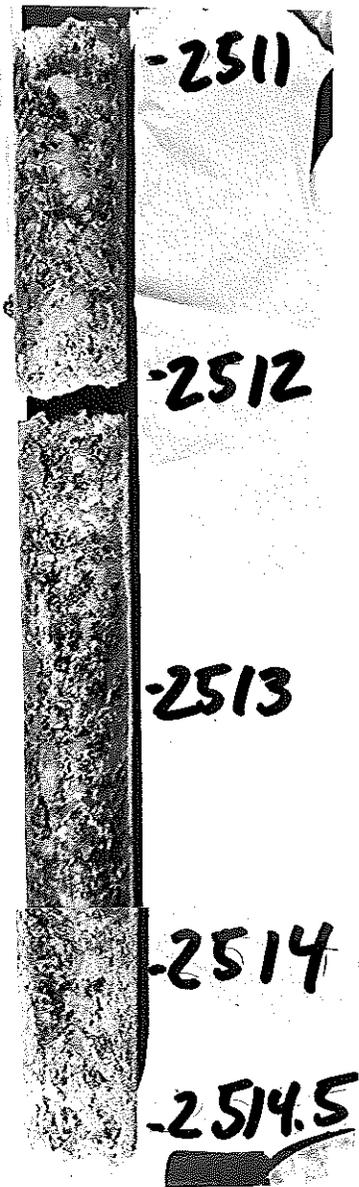
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El Paso Natural Gas Company
State #1-20
2,417' - 2,423'



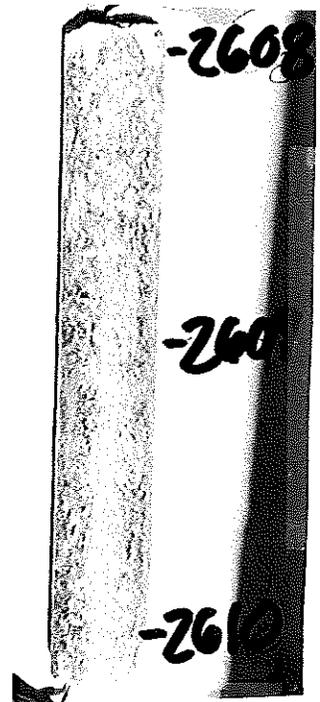
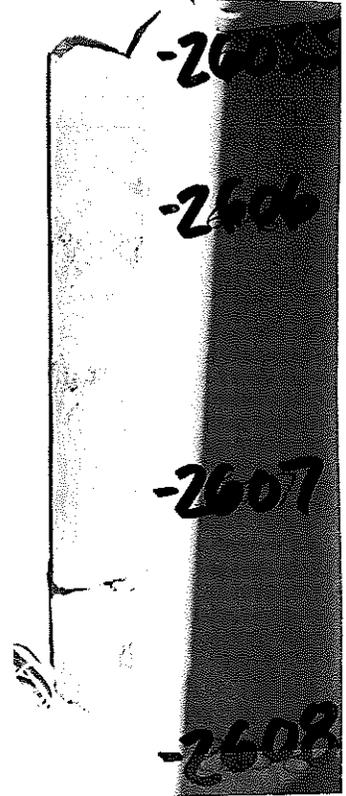
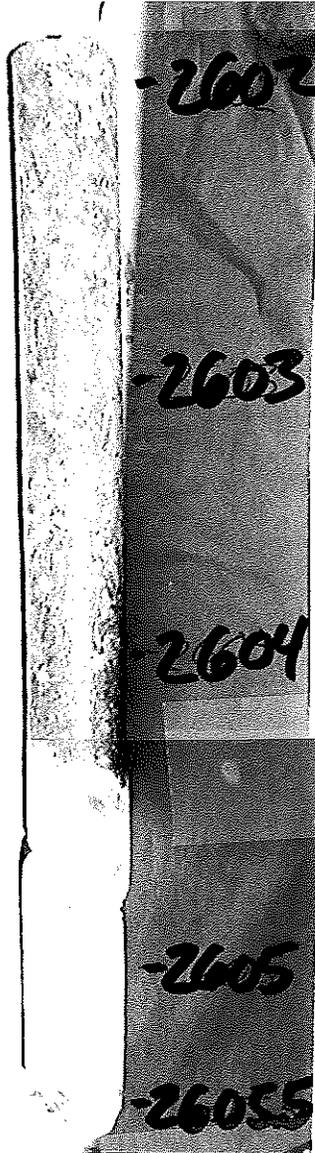
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El Paso Natural Gas Company
State #1-20
2,500' - 2,511'



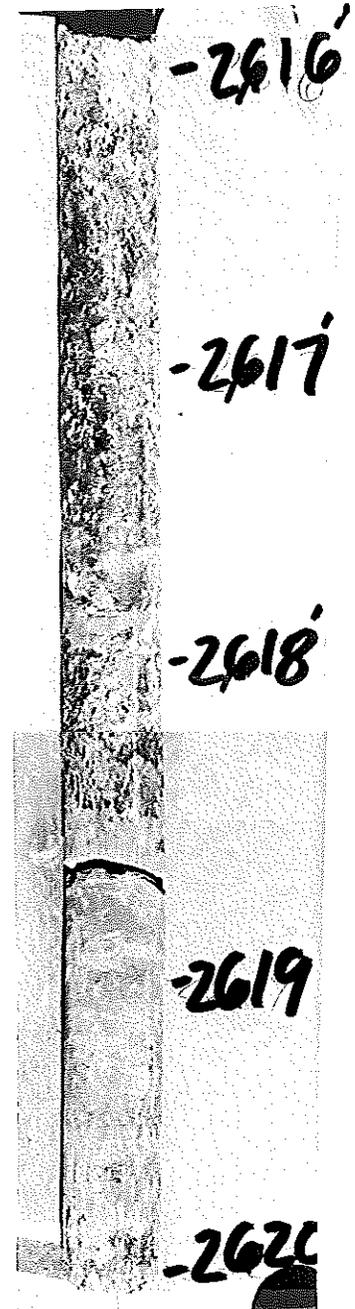
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El Paso Natural Gas Company
State #1-20
2,511' - 2,519.5'



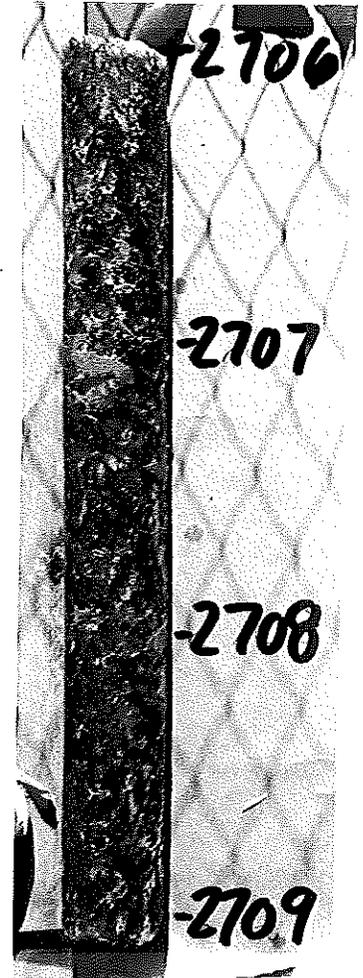
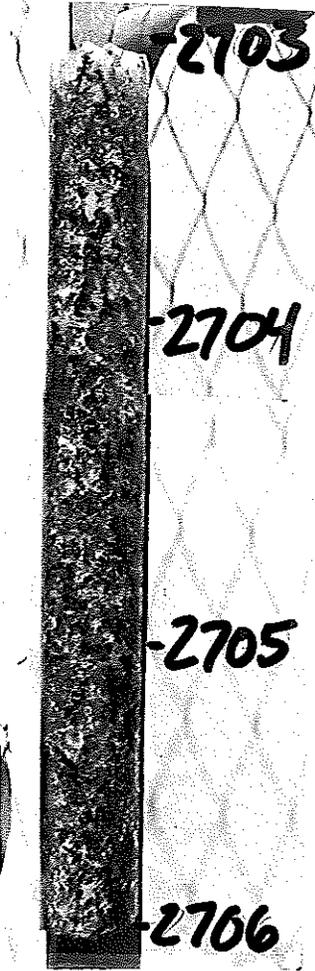
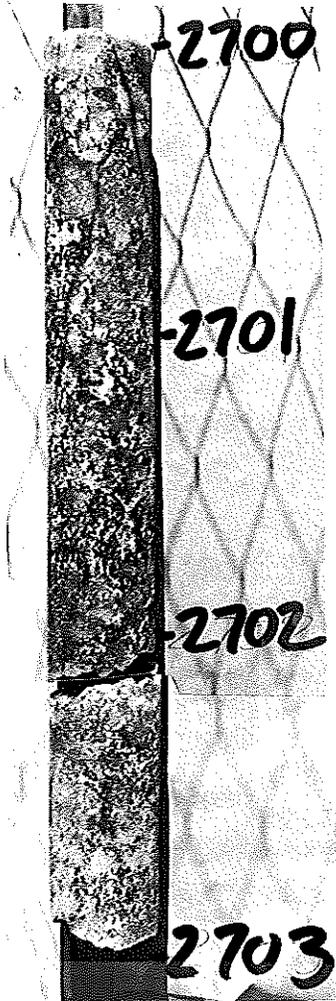
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El Paso Natural Gas Company
State #1-20
2,600' - 2,610'



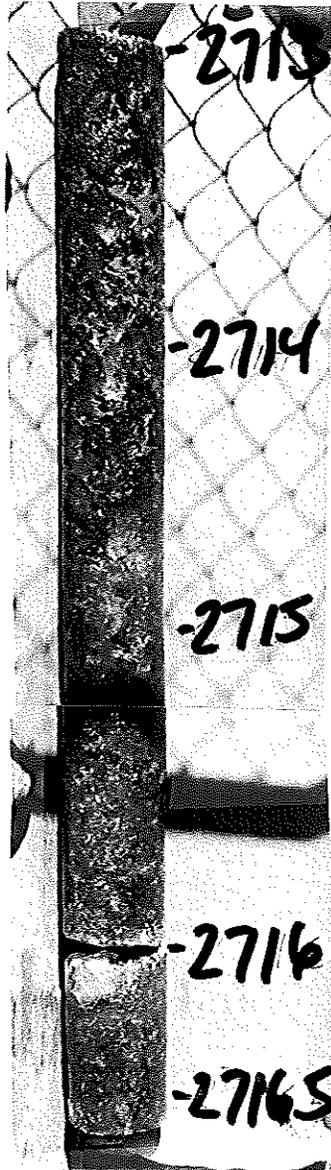
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El Paso Natural Gas Company
State #1-20
2,610' - 2,620'



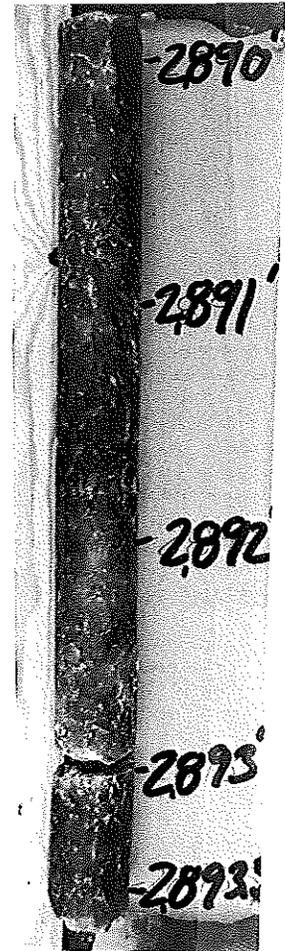
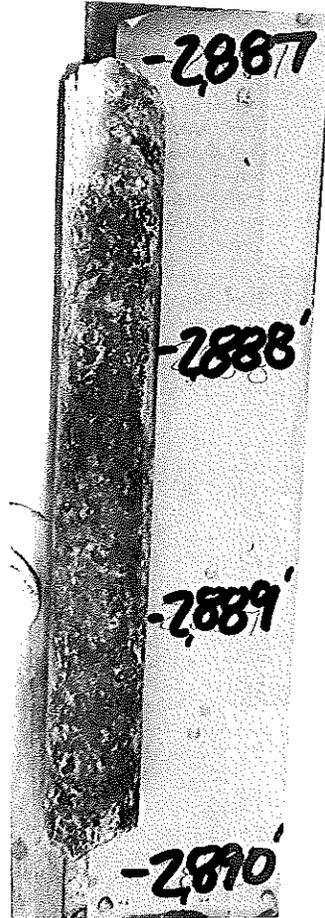
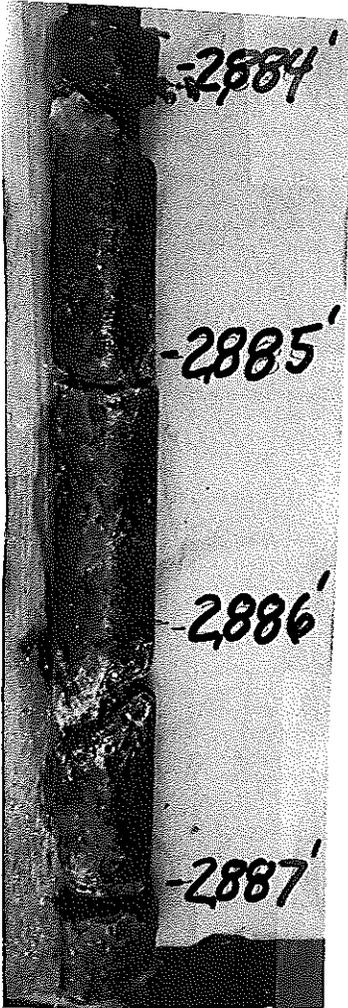
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El Paso Natural Gas Company
State #1-20
2,700' - 2,709'



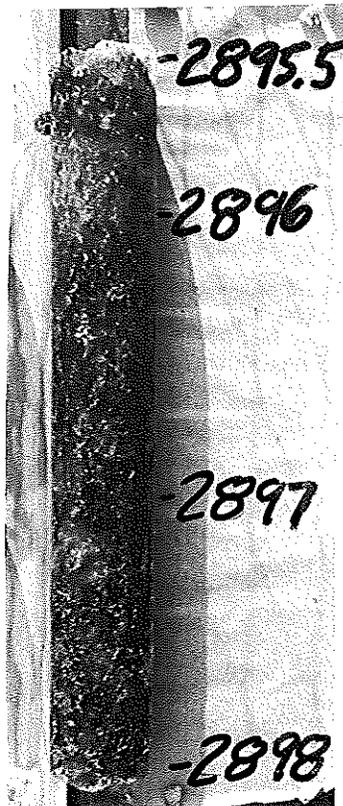
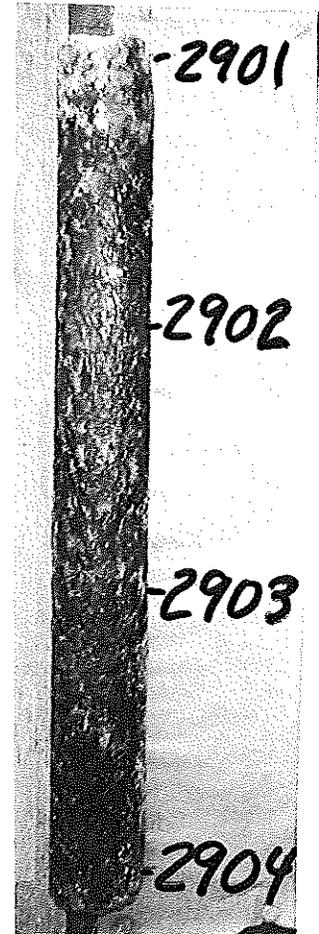
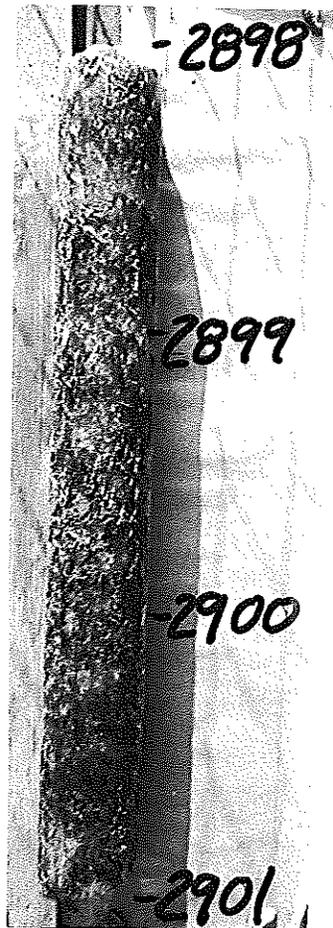
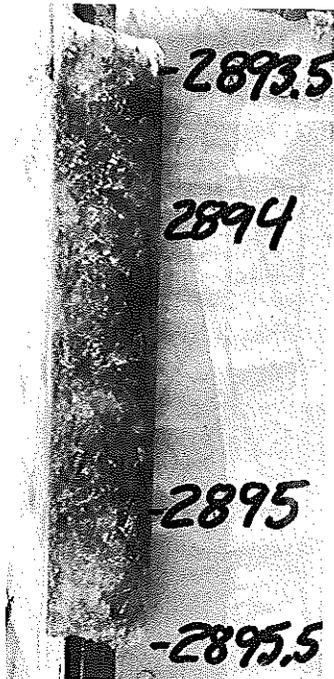
Core Photo Log
El Paso Natural Gas Company
State #1-20
2,709' - 2,720'



Core Photo Log
El Paso Natural Gas Company
State #1-20
2,884' - 2,893.5'



Core Photo Log
El Paso Natural Gas Company
State #1-20
2,893.5' - 2,904'



Drill Time and Cuttings Log

Operator: El Paso Natural Gas Company
 Well: Arizona State #1-20
 Location: 1,300' FNL, 1420' FEL
 Section 20, T7S, R8E
 Pinal County, Arizona

Ground Level Elevation = 1525'
 Spud Date July 10, 2005
 Completion Date: August 6, 2005

926

Casing 9 5/8" K-55 36# set at 90' KB
 Casing 7" K-55 set at 1815' KB

Depth	Drill Rate Minutes/Ft											Lithology	
		Top	Bottom	10+	9	8	7	6	5	4	3		2
90	100											X	Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
100	110											X	Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
110	120											X	Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
120	130											X	Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
130	140										X		Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
140	150										X		Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
150	160										X		Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
160	170										X		Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
170	180										X		Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
180	190										X		Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
190	200										X		Coarse Quartz Sand with sub rounded grains with feldspar and mafic pebbles
200	210										X		Coarse grain quartz conglomerate with olivine and mafic igneous pebbles
210	220										X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
220	230										X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
230	240										X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
240	250										X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
250	260										X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
260	270										X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
270	280										X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
280	290										X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
290	300										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
300	310										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
310	320										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
320	330										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
330	340										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
340	350										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
350	360										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
360	370										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
370	380										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
380	390										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
390	400										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
400	410										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
410	420										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
420	430										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
430	440										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
440	450										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
450	460										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
460	470										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
470	480										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
480	490										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
490	500										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
500	510										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
510	520										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
520	530										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
530	540										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
540	550										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
550	560										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
560	570										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
570	580										X		Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles

580	590						X	Pebble conglomerate with sub rounded quartz, reldspar, and mafic pebbles
590	600						X	Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
600	610						X	Pebble conglomerate with sub rounded quartz, feldspar, and mafic pebbles
610	620						X	Coarse grain sand & pebble conglomerate 90% quartz 10% feldspar & Mafic pebbles
620	630						X	Coarse grain sand & pebble conglomerate 90% quartz 10% feldspar & Mafic pebbles
630	640						X	Coarse grain sand & pebble conglomerate 90% quartz 10% feldspar & Mafic pebbles
640	650						X	Coarse grain sand & pebble conglomerate 90% quartz 10% feldspar & Mafic pebbles
650	660						X	Gray clays/shale
660	670						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
670	680						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
680	690						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
690	700						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
700	710						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
710	720						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
720	730						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
730	740						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
740	750						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
750	760						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
760	770						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
770	780						X	Coarse sub rounded sand conglomerate, 90% quartz and 10% feldspar & mafic
780	790						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
790	800						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
800	810						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
810	820						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
820	830						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
830	840						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
840	850						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
850	860						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
860	870						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
870	880						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
880	890						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
890	900						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
900	910						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
910	920						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
920	930						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
930	940						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
940	950						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
950	960						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
960	970						X	Tan shale
970	980						X	Tan shale
980	990						X	Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & mafic
990	1000						X	Coarse grained sub angular quartz sand with brown clays
1000	1010						X	Coarse grained sub angular quartz sand with brown clays
1010	1020						X	Brown clays with sub rounded quartz sand & feldspar conglomerate
1020	1030						X	Brown clays with sub rounded quartz sand & feldspar conglomerate
1030	1040						X	Sub rounded quartz and igneous sand/conglomerate with brown clays
1040	1050						X	Sub rounded quartz and igneous sand/conglomerate with brown clays
1050	1060						X	Sub rounded quartz and igneous sand/conglomerate with brown clays
1060	1070						X	Sub rounded quartz and igneous sand/conglomerate with brown clays
1070	1080			X				Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & shale
1080	1090			X				Coarse sub rounded sand conglomerate, 95% quartz and 5% feldspar & shale
1090	1100			X				Sub rounded quartz and igneous sand/conglomerate with brown clays
1100	1110			X				Sub rounded quartz and igneous sand/conglomerate with brown clays
1110	1120			X				Sub rounded quartz and igneous sand/conglomerate with brown clays
1120	1130			X				Sub rounded quartz and igneous sand/conglomerate with brown clays
1130	1140			X				Sub rounded quartz and igneous sand/conglomerate with brown clays
1140	1150			X				Sub rounded quartz and igneous sand/conglomerate with brown clays
1150	1160			X				Quartz sand pebbles with minor igneous pebbles
1160	1170			X				Quartz sand pebbles with minor igneous pebbles
1170	1180			X				Quartz sand pebbles with minor igneous pebbles
1180	1190			X				Sub rounded quartz and igneous sand/conglomerate with brown clays
1190	1200			X				Sub rounded quartz and igneous sand/conglomerate with brown clays
1200	1210			X				Sub rounded quartz and igneous sand/conglomerate with brown clays

1210	1220						X		Sub rounded quartz and igneous sand/conglomerate with brown clays
1220	1230						X		Sub rounded quartz and igneous sand/conglomerate with brown clays
1230	1240						X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
1240	1250						X		Coarse grain quartz conglomerate with olivine and mafic igneous inclusions
1250	1260						X		Sub rounded Quartz sand & granite pebbles
1260	1270						X		Sub rounded quartz and igneous sand/conglomerate with brown clays
1270	1280						X		Sub rounded quartz and igneous sand/conglomerate with brown clays
1280	1290						X		Sub rounded quartz and igneous sand/conglomerate with brown clays
1290	1300						X		Brown clays with buff siltstone
1300	1310						X		Brown clays with buff siltstone
1310	1320						X		Sub rounded quartz and igneous sand with brown claystone
1320	1330						X		Tan shale
1330	1340						X		Brown clays with buff siltstone
1340	1350						X		Sub rounded Quartz sand & granite pebbles
1350	1360						X		Sub rounded quartz and igneous sand with brown claystone
1360	1370				X				Sub rounded quartz sand, igneous pebbles and brown clays
1370	1380				X				Sub rounded quartz sand, igneous pebbles and brown clays
1380	1390					X			Sub rounded quartz sand, igneous pebbles and brown clays
1390	1400					X			Sub rounded quartz & feldspar sand with granite pebbles
1400	1410						X		Sub rounded quartz & feldspar sand with granite pebbles
1410	1420						X		Sub rounded Quartz sand & granite pebbles
1420	1430						X		Sub rounded quartz sand conglomerate with minor igneous pebbles
1430	1440						X		Quartz sand pebbles with minor igneous pebbles
1440	1450			X					Milky sub rounded quartz sand
1450	1460			X					Milky sub rounded quartz sand
1460	1470			X					Sub rounded milky quartz sand conglomerate
1470	1480			X					Sub rounded milky quartz sand conglomerate
1480	1490			X					Sub rounded quartz sand with limestone? chips
1490	1500			X					Sub rounded milky quartz sand
1500	1510							X	Sub rounded milky quartz sand
1510	1520							X	Gray clays and claystone with sub rounded quartz sand
1520	1530							X	Gray clays and claystone with sub rounded quartz sand
1530	1540							X	Milky sub rounded quartz sand with brown clays
1540	1550							X	Milky sub rounded quartz sand with brown clays
1550	1560			X				X	Sub rounded milky quartz sand and brown clays
1560	1570			X				X	Sub rounded milky quartz sand and brown clays
1570	1580			X				X	Sub rounded milky quartz sand and brown clays
1580	1590			X				X	Sub rounded milky quartz sand and brown clays
1590	1600			X				X	Sub rounded milky quartz sand and brown clays
1600	1610			X				X	Sub rounded milky quartz sand and brown clays
1610	1620			X				X	Gray siltstone and milky quartz sand & salt
1620	1630			X				X	Gray siltstone and milky quartz sand & salt
1630	1640			X				X	Gray siltstone and milky quartz sand & salt
1640	1650			X				X	Gray siltstone and milky quartz sand & salt
1650	1660			X				X	Gray siltstone and milky quartz sand & salt
1660	1670			X				X	Gray siltstone and milky quartz sand & salt
1670	1680			X				X	Halite & gray siltstone and brown clays
1680	1690			X				X	Halite & gray siltstone and brown clays
1690	1700			X				X	Halite & gray siltstone milky white sub rounded quartz sand.
1700	1710			X				X	Halite & gray siltstone milky white sub rounded quartz sand.
1710	1720			X				X	Halite & gray siltstone milky white sub rounded quartz sand.
1720	1730			X				X	Halite & gray siltstone milky white sub rounded quartz sand.
1730	1740			X				X	Halite & gray clays with coarse gained sand.
1740	1750			X				X	Halite & gray siltstone with milky white sub angular quartz sand.
1750	1760			X				X	Halite & gray siltstone with milky white sub angular quartz sand.
1760	1770			X				X	Halite & gray siltstone with milky white sub angular quartz sand.
1770	1780			X				X	Halite & gray siltstone with milky white sub angular quartz sand.
1780	1790			X				X	Halite & gray siltstone with milky white sub angular quartz sand.
1790	1800			X				X	Halite & gray siltstone with milky white sub angular quartz sand.
1800	1810			X				X	Halite & gray siltstone with milky white sub angular quartz sand.
1810	1820			X				X	Halite & gray siltstone with milky white sub angular quartz sand.
1820	1830			X				X	Halite & gray siltstone with igneous & quartz sand.
1830	1840			X				X	Halite and gray very fine grained gray silt

2470	2480							X	Salt with minor silt and clay
2480	2490							X	Salt with minor silt and clay
2490	2500							X	Salt with minor silt and clay
2500	2510							X	Salt with minor silt and clay
2510	2520							X	Salt with minor silt and clay
2520	2530							X	Salt with minor silt and clay
2530	2540							X	Salt with minor silt and clay
2540	2550							X	Salt with minor silt and clay
2550	2560							X	Salt with minor silt and clay
2560	2570							X	Salt with minor silt and clay
2570	2580							X	Salt with minor silt and clay
2580	2590							X	Salt with minor silt and clay
2590	2600							X	Salt with minor silt and clay
2600	2610							X	Salt with minor silt and clay
2610	2620							X	Salt with minor silt and clay
2620	2630							X	Salt with minor silt and clay
2630	2640							X	Salt with minor silt and clay
2640	2650							X	Salt with minor silt and clay
2650	2660							X	Salt with minor silt and clay
2660	2670							X	Salt with minor silt and clay
2670	2680							X	Salt with minor silt and clay
2680	2690							X	Salt with minor silt and clay
2690	2700							X	Salt with minor silt and clay
2700	2710							X	Salt with minor silt and clay
2710	2720							X	Salt with minor silt and clay
2720	2730						X		Salt with minor silt and clay
2730	2740						X		Salt with minor silt and clay
2740	2750						X		Salt with minor silt and clay
2750	2760				X				Salt with minor silt and clay
2760	2770				X				Salt with minor silt and clay
2770	2780							X	Salt with minor silt and clay
2780	2790							X	Salt with minor silt and clay
2790	2800							X	Salt with minor silt and clay
2800	2810							X	Salt with minor silt and clay
2810	2820							X	Salt with minor silt and clay
2820	2830							X	Salt with minor silt and clay
2830	2840							X	Salt with minor silt and clay
2840	2850						X		Salt with minor silt and clay
2850	2860						X		Salt with minor silt and clay
2860	2870							X	Salt with minor silt and clay
2870	2880							X	Salt with minor silt and clay
2880	2890						X		Salt with minor silt and clay
2890	2900						X		Salt with minor silt and clay
2900	2910							X	Salt with minor silt and clay
2910	2920							X	Salt with minor silt and clay
2920	2930							X	Salt with minor silt and clay
2930	2940							X	Salt with minor silt and clay
2940	2950							X	Salt with minor silt and clay
2950	2960							X	Salt with minor silt and clay
2960	2970							X	Salt with minor silt and clay
2970	2980							X	Salt with minor silt and clay
2980	2990							X	Salt with minor silt and clay
2990	3000							X	Salt with minor silt and clay
3000	3010							X	Salt with minor silt and clay
3010	3020					X			Salt with minor silt and clay
3020	3030					X			Salt with minor silt and clay
3030	3040			X					Salt with minor silt and clay
3040	3050			X					Anhydrite, salt and brown clays
3050	3060			X					Anhydrite, salt and brown clays
3060	3070			X					Anhydrite, salt and brown clays
3070	3080			X					Anhydrite, salt and brown clays
3080	3090			X					Anhydrite, salt and brown clays
3090	3100			X					Anhydrite, salt and brown clays

3100	3110				X				Anhydrite, salt and brown clays
3110	3120				X				Anhydrite, bright milky white with minor gray siltstone
3120	3130			X					Anhydrite, bright milky white coarse ships
3130	3140		X						Anhydrite, bright milky white coarse ships
3140	3150		X						Anhydrite, bright milky white coarse ships
3150	3160				X				Anhydrite, bright milky white coarse ships
3160	3170				X				Anhydrite, bright milky white coarse ships
3170	3180				X				Anhydrite, bright milky white coarse ships
3180	3190				X				Anhydrite, bright milky white coarse ships
3190	3200				X				Anhydrite, bright milky white coarse ships
3200	3210				X				Anhydrite, bright milky white coarse ships
3210	3220			X					Milky white anhydrite with minor gray and red siltstones
3220	3230		X						Milky white anhydrite with minor gray and red siltstones
3230	3240	X							Milky white anhydrite with minor gray and red siltstones
3240	3250	X							Milky white anhydrite with minor gray and red siltstones
3250	3260	X							Milky white anhydrite with minor gray and red siltstones
3260	3270	X							Milky white anhydrite with minor gray and red siltstones
3270	3280	X							Milky white anhydrite with minor gray and red siltstones
3280	3290	X							Milky white anhydrite with minor gray and red siltstones
3290	3300	X							Milky white anhydrite with minor gray and red siltstones
3300	3310	X							Milky white anhydrite with minor gray and red siltstones
3310	3320	X							Milky white anhydrite with minor gray and red siltstones

El Paso Natural Gas 1-20 State (Permit 926), c ne 20-7s-8e (Submitted by Greg Gettman)

7/08/05

Conduct EPNG Safety Orientation for Stewart Brothers Drilling Personnel. Move in and rig up Stewart Brothers Drilling Co. Falling 2500 Mineral Exploration Drill Rig.

7/09/05

Rig up Stewart Brothers Drilling Company. Repair mud pump.

7/10/05

Drill 12 1/4" conductor hole to 94'. Set 90' 9 5/8" conductor casing with 28 sacks of cement. Waiting on cement.

7/11/05

Waiting on cement. Repair crown block cable. Wait on 8 3/4" bit sub from Deming, NM. Drilling on 9 5/8" casing shoe.

7/12/05

Drilling on 8 3/4" surface hole at 516'. 422' in last 24 hours. Mud weight 8.8 lbs./gal. Viscosity 40 sec./qt. Record highs of 115 degrees F in Phoenix and 118 in Eloy, AZ.

7/13/05

Drilling on 8 3/4" surface hole at 829'. 313' in last 24 hours. Mud weight 8.8 lbs./gal. Viscosity 42 sec./qt. Short trip to clean and condition hole.

7/14/05

Drilling on 8 3/4" surface hole at 1,151'. 322' in last 24 hours. Mud weight 8.8 lbs./gal. Viscosity 38 sec./qt.

7/15/05

Drilling on 8 3/4" surface hole at 1,317'. 166' in last 24 hours. Short trip to clean and condition hole. Drilling hard clays. Mud weight 8.8 lbs./gal. Viscosity 43 sec./qt.

7/16/05

(From 8 AM 7/16 to 8 AM 7/17)

Drilling on 8 3/4" surface hole at 1,671'. 354' in last 24 hours. Mud weight 9.3 lbs./gal. Viscosity 43 sec./qt. Chlorides 1250 ppm.

7/17/05

(From 8 AM 7/17 to 8 AM 7/18)

Reached Total Depth of 1,840' on 8 3/4" surface hole at Midnight. Made 169' in last 24 hours. Repair fuel pump on rig. Mud weight 9.6 lbs./gal. Viscosity 33 sec./qt. Chlorides 93,000 ppm. Trip in and out of hole to clean and condition hole prior to running logs and 7" casing. Got hung up several time tripping out of hole.

7/18/05

Trip out of hole. Lay down collars. Rig up Welenco Well Logging. Run, 4 Arm Caliper & Drift survey, Electric, Gamma, Temperature, & Dual Induction Logs. Logger TD 1,847.' Run 1,817' 7" J-55 23# casing.

7/19/05

Circulate drilling mud through 7" Casing. Rig up Halliburton Farmington, NM cementing crew and equipment. Hold safety meeting. Displace casing with 70 barrels water. Pump 180 sacks of PRB-

El Paso Natural Gas 1-20 State (Permit 926), c ne 20-7s-8e (Submitted by Greg Gettman)

11 light cement with 2% calcium chloride and 1/4#/sack flocele followed by 130 sacks standard class cement with 2% calcium chloride and 1/4#/sack flocele. Drop plug and displace with 70 barrels water. Circulated cement to the surface and displaced 20 barrels cement to the pits. Witnessed by Steve Rauzi with the Arizona Oil and Gas Conservation Commission. Wait on cement.

7/20/05

Pressure test 7" casing to 1000 psig for 30 minutes. Held ok. Trip in hole with drill string and 6 1/4" bit. Drill out cement and 7" casing shoe. Shut down waiting on delivery of steel mud pit for salt saturated drilling.

7/21/05

Drilling at 1921'. Made 81' in last 24 hours. Move in & rig up 350 bbl steel mud pit for salt saturated drilling. Unload three 100 bbl transports of saturated brine from Amerigas, Glendale. Mix salt saturated drilling fluids.

7/22/05

Tripping out of 6 1/4" hole for core barrel. Drilled to 2,310'. Made 389' in last 24 hours. Mud Weight 10 lbs./gal. Viscosity 29 sec./qt. Chlorides 236,000 ppm.

7/23/05

Total Depth 2,329'. Made 19' in last 24 hours. Tripp out of hole with 6 1/4" bit and drill string. Run in hole with 20' 6 1/4" x 4" id core barrel. Core 19'. Trip out of hole with core barrel. Recovered 19' of 4" core, approximately 90% NaCl and 10% clay stringers and inclusions. Run in hole with drill string and 6 1/4" bit.

7/24/05

Total Depth 2,423'. Made 94' in last 24 hours. Run in hole with drill string and 6 1/4" bit. Drill to 2,404'. Trip out of hole with 6 1/4" bit and drill string. Run in hole with 20' 6 1/4" x 4" core barrel. Tripp out of hole with core barrel. Recovered 19' of 4" core on second run, approximately 90% NaCl and 10% clay stringers and inclusions. Run in hole with drill string and 6 1/4" bit.

7/25/05

Total Depth 2,520'. Made 97' in last 24 hours. Run in hole with drill string and 6 1/4" bit. Drill to 2,500'. Trip out of hole with 6 1/4" bit and drill string. Run in hole with 20' 6 1/4" x 4" core barrel and drill 20'. Trip out of hole with core barrel. Chlorides 245,000 ppm. Mud Weight 10 lbs./gal. Viscosity 29 sec./qt.

7/26/05

Total Depth 2,600'. Made 80' in last 24 hours. Trip out of hole with 20' 6 1/4" x 4" core barrel. Recovered 19' of 4" core on third run, approximately 93% NaCl and 7% inter-crystalline silt and clays. Run in hole with drill string and 6 1/4" bit. Drill to 2,600'. Trip out of hole with 6 1/4" bit and drill string. Chlorides 245,000 ppm. Mud Weight 10 lbs./gal. Viscosity 29 sec./qt.

7/27/05

Total Depth 2,676'. Made 76' in last 24 hours. Trip out of hole with 6 1/4" bit and drill string. Trip in hole with 20' 6 1/4" x 4" core barrel. Core 20'. Trip out of hole. Recovered 20' of 4" core on fourth run, approximately 86% NaCl and 14% inter-crystalline silt & clay with thin (2" to 12") clay intervals. Run in hole with drill string and 6 1/4" bit. Drill to 2,676'. Chlorides 245,000 ppm. Mud Weight 10 lbs./gal. Viscosity 30 sec./qt.

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7/28/05

Total Depth 2,720'. Made 44' in last 24 hours. Drill to core point at 2700'. Trip out of hole with 6 1/4" bit and drill string. Trip in hole with 20' 6 1/4" x 4" core barrel. Core 20'. Trip out of hole. Recovered 20' of 4" core on fifth run, approximately 94% NaCl and 6% inter-crystalline claystone. Trip back in hole with 6 1/4" bit. Chlorides 245,000 ppm. Mud Weight 10 lbs./gal. Viscosity 30 sec./qt.

7/29/05

Total Depth 2,820'. Made 100' in last 24 hours. Drill to core point at 2800'. Trip in hole with 20' 6 1/4" x 4" core barrel. Core 20'. Trip out of hole. Chlorides 245,000 ppm. Mud Weight 10 lbs./gal. Viscosity 32 sec./qt.

7/30/05

Total Depth 2,820'. Made 0' in last 24 hours. Trip out of hole with 20' 6 1/4" x 4" core barrel. Recovered 0' of core. Trip back in with core barrel. Wash over core. Trip out of hole with 20' 6 1/4" x 4" core barrel. Recovered 0' of core. Trip back in hole with 6 1/4" bit and drill string.

7/31/05

Total Depth 2,904'. Made 84' in last 24 hours. Drill to core point at 2884'. Trip out of hole with 6 1/4" bit and drill string. Trip in hole with 20' 6 1/4" x 4" core barrel. Core 20'. Trip out of hole. Traveling block cable parted. Shut down for repairs. Chlorides 255,000 ppm. Mud Weight 10 lbs./gal. Viscosity 31 sec./qt.

8/1/05

Total Depth 3,090'. Made 186' in last 24 hours. Trip out of hole with 20' 6 1/4" x 4" core barrel. Recovered 20' of 4" core on seventh run (2,884'-2,904'), approximately 94% NaCl and 6% inter-crystalline claystone. Trip back in hole with 6 1/4" bit and drill to 3,090'. Chlorides 255,000 ppm. Mud Weight 10 lbs./gal. Viscosity 31 sec./qt.

8/2/05

Total Depth 3,236'. Made 146' in last 24 hours. Drilling hard anhydrite below salt beds with 6 1/4" bit. Chlorides 255,000 ppm. Mud Weight 10 lbs./gal. Viscosity 31 sec./qt.

8/3/05

Total Depth 3,316'. Made 80' in last 24 hours. Called Total Depth at 6:00 AM 8/04/05. Short tripping to 2,900' to clean and condition hole for open hole logs. Chlorides 280,000 ppm. Mud Weight 10.3 lbs./gal. Viscosity 31 sec./qt.

8/4/05

Total Depth 3,316'. Circulate on bottom for two hours to clean hole. Come out of hole with 1,800' of pipe in the racks and laying down drill collars and remaining drill pipe. Ready for Schlumberger at 7:00 PM. Schlumberger (Farmington) on location at 1:00 AM on 8/5/05. Logger total depth 3346KB. Run Platform Express High Resolution Lateralog, Gamma Ray, Triple Lithology Density, Compensated Neutron, Natural Gamma Ray Spectroscopy, & Dipole Sonic Logs. Inter-bedded salts, claystones, and shales from 1,815' to 3,014'. Best salt section from 2,358' to 3,014' (656' gross feet containing approximately 550' of 90+% NaCl).

8/5/05

Complete Schlumberger open hole logging job. Prep to Plug and Abandon. Run in hole with drill pipe to 1877'. Set 40 sack cement plug 1,877' to 1,757' per AOGCC commission guidelines. Fill hole with 9.5 lb/gal bentonite plugging grout while displacing salt based mud from hole. Set 12 sack cement plug from surface to 60' below ground level to surface. Plugging witnessed by Steve

El Paso Natural Gas 1-20 State (Permit 926), c ne 20-7s-8e (Submitted by Greg Gettman)

Rauzi with the Arizona Oil and Gas Conservation Commission. Waiting on trucks to dispose of salt saturated drilling mud at approved waste disposal site.

ESPASO NATURAL GAS CO.

ARIZONA STATE
#1-20

926

API Well No.:

02-021-20007

7/19/2005

PINAL

7" SURFACE

Customer Representative:
GREG DETTMAN/719-351-4093

Halliburton Operator:
LEONARD CLITSO

Ticket No.:
3830928

HALLIBURTON

CEMENT JOB SUMMARY SHEET

Job Type

7" SURFACE

				<i>Measure</i>	
Casing Surface Intermediate Production Tubing Drill Pipe Open Hole	Size 7°	Weight 23	Grade J55	d Depth 1,817	Total Casing
	8 3/4			1,847	

CEMENT DATA

Spacer	Bbls WATER		
Cement 1 Additives	PRB-II 2% C.C.- 1/4# FLOCELE		180 Sacks
	Weight (lb/gal)	Yield (cuft/sk)	Water (gal/sk)
Cement 2 Additives	STD 2% C.C.- 1/4# FLOCELE		130 Sacks
	Weight (lb/gal) 15.80	Yield (cuft/sk) 1.17	Water (gal/sk) 5.01
Cement 3 Additives			Sacks
	Weight (lb/gal)	Yield (cuft/sk)	Water (gal/sk)
Cement 4 Additives			Sacks
	Weight (lb/gal)	Yield (cuft/sk)	Water (gal/sk)
Displacement	H20	#REF!	(lb/gal)

CEMENTING EQUIPMENT

Provider			
Guide Shoe	ea.	Centralizers	ea.
Float Shoe	ea.	Plug Type	7
Float Collar	ea.	Packer	ft.
DV Tool	ft.	Retainer	ft.

HALLIBURTON JOB SUMMARY

SALES ORDER NUMBER
385 28

TICKET DATE

July 19, 2005

REGION
NORTH AMERICA

NWA/COUNTRY
ROCKY MOUNTAIN

BDA / STATE
AZ

COUNTY
PINAL

MBU ID / EMPL #
210224

H.E.S. EMPLOYEE NAME
LEONARD CLITSO

PSL DEPARTMENT

ZONAL ISOLATION

LOCATION
FARMINGTON, NM

COMPANY
ESPASO NATURAL GAS CO.

CUSTOMER REP / PHONE
GREG DETTMAN/719-351-4093

TICKET AMOUNT

WELL TYPE
02 GAS

API/UVI #

WELL LOCATION

LAND

DEPARTMENT
ZONAL ISOLATION 10003

SAP BOMB NUMBER

JOB TYPE

7" SURFACE

LEASE NAME

Well No.
#1-20

SEC /

TWP /

RNG

SEC 20 / TWP 07S / RNG 08E

H.E.S. EMP NAME / EMP # / (EXPOSURE HOURS)	HRS	HRS	HRS	HRS	
Leonard Clitso 210224	7A	Chris Padilla 201426	7A	Steve Romero 340318	7

H.E.S. UNIT #S / (R / T MILES)	R / T MILES	R / T MILES	R / T MILES	R / T MILES	
10286185	1200	10251407	1200	10724579/10713212	1200

Form. Name _____ Type: _____
 Form. Thickness _____ From _____ To _____
 Packer Type _____ Set At _____
 Bottom Hole Temp. _____ Pressure _____
 Retainer Depth _____ Total Depth _____

Date	Called Out	On Location	Job Started	Job Completed
	7/18/05	7/19/05	7/19/05	7/19/05
Time	06:00	07:00	11:29	13:20

Tools and Accessories

Type and Size	Qty	Make
Float Collar	7	
Float Shoe	7	
Centralizers	7	
Top Plug	7	
Limit Clamp	7	
BASKET	7	
Insert Float	7	
Guide Shoe	7	
Weld-A	7	

Well Data

Casing	New/Used	Weight	Size	Grade	From	To	Total Casing
Surface	NEW	23.0	7	J55	KB	1,817	
Intermediate							
Production							
Drill Pipe							
Tubing							
Open Hole			8 3/4		O	1,847	Holes
Perforations							
Perforations							
Perforations							

Materials

Mud Type	H2O BASE	Density	9	Lb/Gal
Disp. Fluid	H2O	Density	8.33	Lb/Gal
Prop. Type		Size		Lb
Prop. Type		Size		Lb
Acid Type		Gal.		%
Acid Type		Gal.		%
Surfactant		Gal.		In
NE Agent		Gal.		In
Fluid Loss		Gal/Lb		In
Gelling Agent		Gal/Lb		In
Fric. Red.		Gal/Lb		In
Breaker		Gal/Lb		In
Blocking Agent		Gal/Lb		
Perpac Balls		Qty.		
Other				
KCL substitute				
Other				
Other				

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
7/19/05	7.00	7/19/05	2.50	SEE JOB LOG
7/19/05		7/19/05		
Total	7.00	Total	2.50	

Ordered	Hydraulic Horsepower Avail.	Use
Treating	Average Rates in BPM Disp.	Overall
Feet	Cement Left in Pipe Reason	Customer Request
35.00		

Cement Data

Stage	Sacks	Cement	Bulk/Sks	Additives	W/Rq.	Yield	Lbs/Gal	Bbls
LEAD	180	PRB-II	BULK	2% C.C.- 1/4# FLOCELE				
TAIL	130	STD	BULK	2% C.C.- 1/4# FLOCELE	5.01	1.17	15.8	27
			BULK					
			BULK					
			BULK					

Summary

Circulating Breakdown	RIG	Displacement Maximum	HES PUMP	Preflush:	Gal - BBI	70	Type:	WATER
Lost Returns	NO			Load & Bkdn:	Gal - BBI		Pad:Bbl -G ₂	
Average	20	Actual TOC	SURFACE	Excess /Return	Gal BBI		Calc.Disp B	70
Shut In: Instant		Frac. Gradient		Treatment:	Gal - BBI		Actual Disp.	70.0
		5 Min.	15 Min.	Cement Slurry	Gal - BBI		Disp:Bbl-G ₂	27
				Total Volume	Gal - BBI			167

Frac Ring #1 **Frac Ring #2** **Frac Ring #3** **Frac Ring #4**

**THE INFORMATION STATED HEREIN IS CORRECT
CUSTOMER REPRESENTATIVE**

SIGNATURE _____

ELPASO

ARIZONA STATE #1-20

WATER Formation

Field

PINAL, AZ USA

HES Ticket Number Based:

Operator: LEONARD CLITSO

7" SURFACE

Ticket Number: 3830928

Prepared for: GREG DETTMAN/719-351-4093

JULY 19,2005

Prepared by:

LEONARD CLITSO/505-486-0059

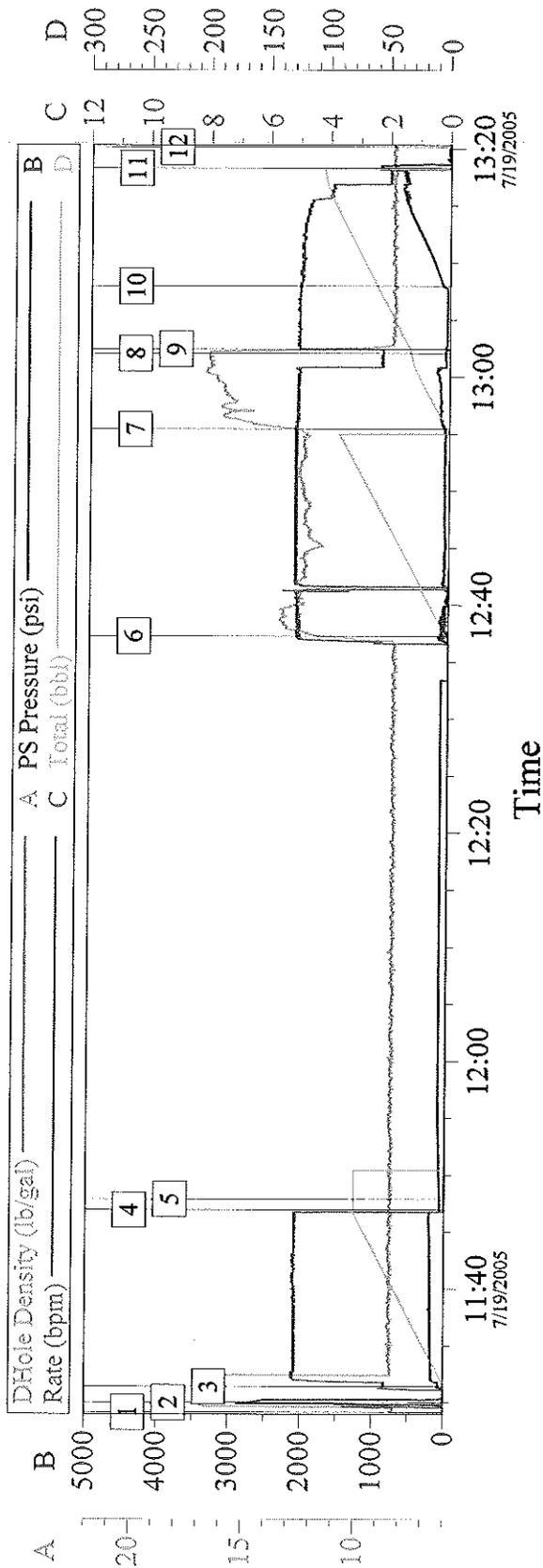
HALLIBURTON

The Future is Working Together.

Notice: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness, completeness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

Arizona Sate #1-20

7" Surface



Event Log			
Intersection	PP	Intersection	PP
1 Start Job	11:29:10	2 Test Lines	11:30:02 2724
3 Pump Spacer 1	11:31:26 82.42	4 Shut Down	11:46:57 55.42
5 Wait on H2O Truck	11:47:53 64.70	6 Pump Lead Cement	12:37:17 38.58
7 Pump Tail Cement	12:55:26 63.03	8 Drop Top Plug	13:02:05 54.33
9 Pump Displacement	13:02:27 57.41	10 Displ Reached Cement	13:07:58 102.8
11 Bump Plug	13:18:17 966.9	12 End Job	13:20:10 1.940

Customer: Elpaso Natural Gas Co. Job Date: July 19, 2005 Ticket #: 3830928

HALLIBURTON
Cem Win v1.7.1
19-Jul-05 13:30

Cementing Calculations for Surface Pipe and Production Strings

Well Information

Hole Size	8 3/4 in
TD	1847 ft
Casing Size	7 in
Casing Depth	1817 ft
Casing Weight	23 lb/ft
Shoe Joint Length	35 ft
Float Collar @	1782 ft
Wellbore Fluid	8.6 lb/gal
Spacer/Flush	8.4 lb/gal
Displacement Fluid	8.4 lb/gal
Desired TOC	0 ft

Redbook Information

V&H; Casing&Hole	lin.ft./bbl	37.3484	bbls/lin.ft	0.0268	lin.ft/cuft	6.652	cuft/lin.ft	0.1503
Casing Capacity		25.4		0.0393		4.524		0.221
Buoyancy Factor		0.8727						

Cement Fill Volumes

Tail Cement	bbls	
Shoe Joint		1.38
Annulus Cement		25.71

Cement/Slurry Information

	Tail Cement	Lead Cement 1	Lead Cement 2
Density (lb/gal)	15.80	12.40	0.00
Yield (cuft/sk)	1.17	1.89	0.00
Water Req. (gal/sk)	5.01	10.03	0.00
Spacer/Flush (bbls)		70.00	0.00
Initial Sacks	130.00	180.00	0.00
Calculated cu.ft.	152.10	340.20	0.00
% Excess	0.00	0.00	0.00
Total cu.ft.	152.10	340.20	0.00
Water Req. (bbls)	15.51	42.99	0.00
Sacks Required	130.00	180.00	0.00
Barrels of Slurry	27.09	60.59	0.00
Lineal Feet	960.36	2262.93	0.00
Excess BBLS		36.88	0.00
Top of Cement	886.64	0.00	0.00
Spacer/Flush (ft)		0.00	0.00

Calculated Values

Displacement	70.03	bbls
PSI to Land Plug	540.25	psi
Top of Cement		
Tail	886.64	ft
Lead 1	0	ft
Lead 2	0	ft
Cement Excess	36.88	bbls
PSI to Lift Pipe	947.6779	psi

NOTE! The lineal feet of Spacer/Flush is on TOC & not pumped out of the annulus

Differential Pressure

	Density	Hydrostatic factor	Feet	Hydrostatic PSI	Differential PSI
Well Fluid	8.6	0.4470			
Disp. Fluid	8.4	0.4366	1782.00	778.09	
Tail Cement	15.8	0.8213	960.36	788.74	
Lead Cement 1	12.4	0.6446	821.64	529.60	
Lead Cement 2	0	0.0000	0.00	0.00	
Spacer/Flush	8.4	0.4366	0.00	0.00	
Total				1318.34	540.25

Displacement in bbls

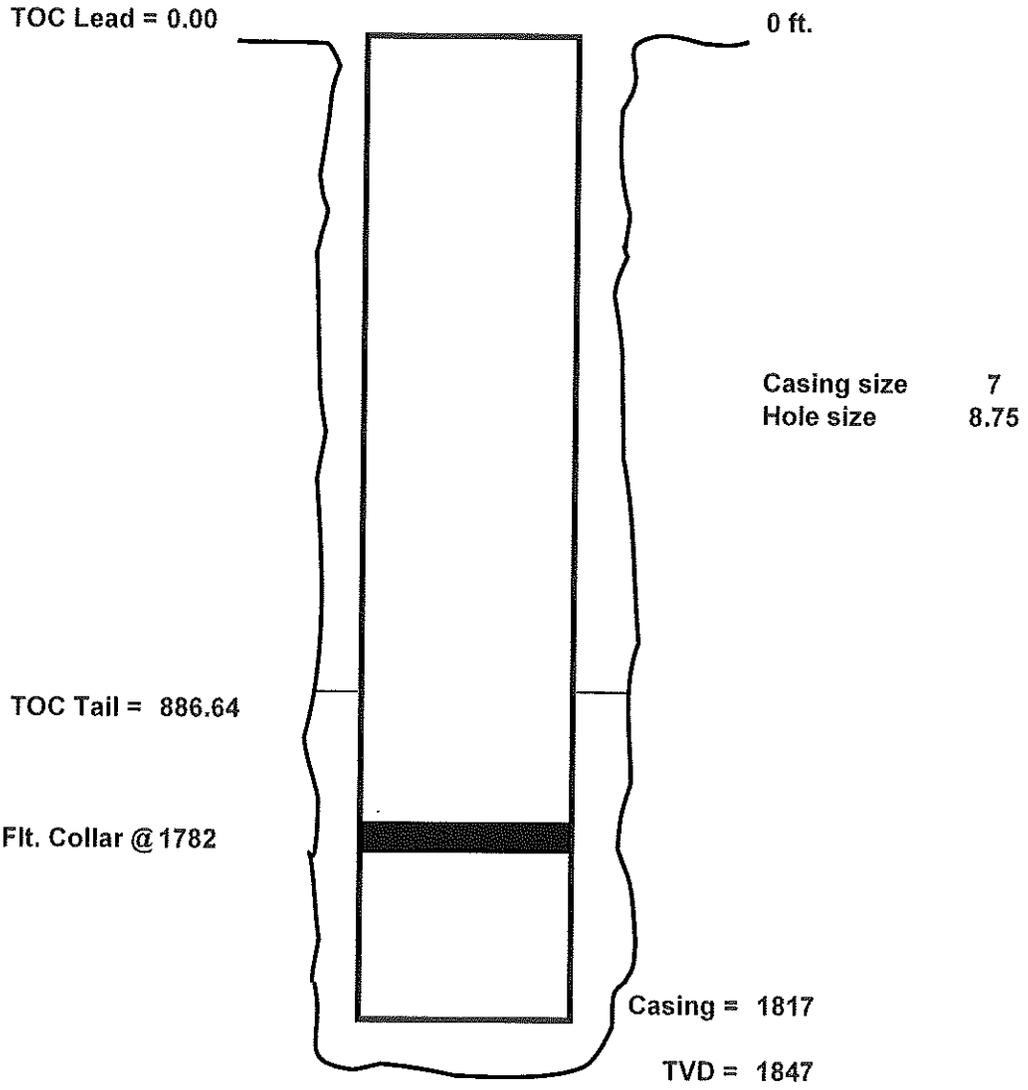
70.03

Absolute Volume

Tail	1137.78	gals
Lead 1	2544.87	gals
Lead 2	0.00	gals

Customer ESPASO NATURAL GAS CO.
 Well Name ARIZONA STATE
 Lease #1-20
 County PINAL
 Ticket # 3830928
 Date July 19, 2005
 Cementer LEONARD CLITSO

Well Schematic



APPLICATION TO PLUG AND ABANDON

FIELD NA
 OPERATOR El Paso Natural Gas Co. ADDRESS & PHONE 2 N. Nevada, Colo Spgs, CO 80944
 LEASE NUMBER (Lessor's name if fee) Arizona State WELL NO. #1-20
 LOCATION 1300' FNL, 1420' FEL, Section 20, T7S, R8E Pinal Co.
 TYPE OF WELL Stratigraphic Test TOTAL DEPTH _____
 (Oil, Gas, or Dry)
 ALLOWABLE (If Assigned) NA
 LAST PRODUCTION TEST OIL _____ (Bbls.) WATER _____ (Bbls.)
 GAS _____ (MCF) DATE OF TEST _____
 PRODUCING HORIZON NA PRODUCING FROM _____ TO _____

1. COMPLETE CASING RECORD:

9 5/8" Casing at approximately 80'
7" Casing at approximately 1800'

2. FULL DETAILS OF PROPOSED PLAN OF WORK:

1. Contact Steve Rauzi at least 48 hours prior to starting abandonment operations.
2. Set a 120' cement plug across at the base of the surface casing (at approximately 1800'). Such plug shall extend at least 50' below to 50 feet above the casing shoe.
3. Circulate the salt saturated drilling mud from above the top of the cement plug at approximately 1750' with plugging mud. Plugging mud shall contain a minimum of 15 pounds per barrel of sodium bentonite and a nonfermenting polymer having a minimum consistency of 9 pounds per gallon and a minimum viscosity of 50 seconds per quart mixed with fresh water.
4. Set a 50 foot cement plug from the to 1 foot below ground level to 51 feet below ground level.
5. Cut off surface casing 1 foot below ground level.
6. Weld a metal plate on pipe inscribed with; El Paso Natural Gas Co., Arizona State #1-20, 1,300' FNL, 1,420' FEL, Section 20, T7S, R8E, Pinal County, Arizona

DATE COMMENCING OPERATIONS To be determined

NAME OF PERSON DOING WORK Stewart Brothers Drilling ADDRESS 306 Airport Road
Milan, New Mexico

Steve Setzman
 Signature
Manager Facility Planning
 Title
2 North Nevada, Colorado Spgs, CO 80944
 Address
6-29-2005
 Date

Mail two copies of completed form to:
 Oil and Gas Program Administrator
 Arizona Geological Survey
 418 W. Congress #100
 Tucson, AZ 85701

Date Approved 7-5-05
 STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 By SC Raming

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
 Application to Plug and Abandon
 File Two copies
 Form No. 9

Permit No. 926



PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION,
STATE OF ARIZONA,

To: EL PASO NATURAL GAS COMPANY
(OPERATOR)

to drill a well to be known as

1-20 STATE

(WELL NAME)

1300' FNL 1420 FEL
1320' FNL & 1320' FEL

located _____

Section 20 Township 7S Range 8E, PINAL County, Arizona.

The N/A STRAT TEST of said
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 11 day of April, 2005, 1900.

OIL AND GAS CONSERVATION COMMISSION

By [Signature]

EXECUTIVE DIRECTOR
OIL & GAS ADMINISTRATOR

PERMIT 00926

RECEIPT NO. 3131

A.P.I. NO. 02-021-20007

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill
FORM NO. 27

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

Revised

APPLICATION TO DRILL

RE-ENTER OLD WELL

NAME OF COMPANY OR OPERATOR

El Paso Natural Gas Company

Address

City

State

Phone Number

2 North Nevada Ave

Colorado Springs

CO 80903

719.520.4533

Drilling Contractor

Stewart Brothers Drilling Co.

Address

306 Airport Road, Milan, New Mexico 87021

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor

Arizona State

Well number

1-20

Elevation (ground)

1525'

Nearest distance from proposed location to property or lease line: #08-108703

1320'

feet

Distance from proposed location to nearest drilling, completed or applied-for well on the same lease:

none

feet

Number of acres in lease

640

Number of wells on lease, including this well, completed in or drilling to this reservoir:

none

If lease purchased with one or more wells drilled, from whom purchased.

Name

Address

Well location (give footage from section lines)

1300' FNL & 1420' FBL

Section - Township - Range or Block and Survey

20-7S-8E, G. & S. R. M.

Dedication, per A.A.C. R12-7-104(A)(3)

n/a

Field and reservoir (if wildcat, so state)

Stratigraphic Test

County

Pinal

Distance in miles and direction from nearest town or post office

4.5 miles northeast of Eloy Arizona

Proposed depth:

4500'

Rotary or cable tools

Rotary

Approximate date work will start

June 2005

Bond status

filed 03/02/05

Organization Report

Filing Fee of \$25.00

Amount

\$25,000

On file

Or attached

X

Attached

X

Remarks

Stratigraphic test per Arizona Administrative code, Title 12, Chapter 7 R12-7-128

API # 02-021-20007

** Amended Location Footage*

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Manager, Facility Planning of the El Paso Natural Gas (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature

Date

Mail completed form to:
Oil and Gas Program Administrator
Arizona Geological Survey
416 W. Congress, #100
Tucson, AZ 85701-1315

Permit Number: 926

Approval Date: 6-8-05

Approved By: SL Rainey

NOTICE: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

Form No. 3

**STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION**

Application to Drill or Re-enter
File Two Copies

- Operator shall outline on the plat the acreage dedicated to the well in compliance with A.A.C. R12-7-107. Permit 926
- A registered surveyor shall show on the plat the location of the well and certify this information in the space provided.
- ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.
- Is the operator the only owner in the dedicated acreage outlined on the plat below? YES _____ NO X
- If the answer to question four is no, have the interests of all owners been consolidated by communization agreement or otherwise? YES X NO _____ If answer is yes, give type of consolidation Arizona State Lands
- If the answer to question four is no, list all the owners and their respective interests below:

Owner	Land Description
	<p style="text-align: center;">CERTIFICATION</p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p style="text-align: right;"><i>Greg Gettman</i></p> <p>Name <u>Greg Gettman</u></p> <p>Position <u>Manager, Facility Planning</u></p> <p>Company <u>El Paso Natural Gas</u></p> <p>Date <u>6-7-2005</u></p> <p>I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.</p> <p style="text-align: center;"> </p> <p>Date Surveyed <u>5/5/05</u></p> <p>Registered Land Surveyor</p> <p style="text-align: right;"><i>Gary G. Eidson</i></p> <p>Certificate No. <u>29871</u></p>

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type
9 5/8"	36#	K-55	0	70'	70'	19	Class "A"
7"	23#	J/K-55	0	1800'	1800'	230	Class "A"

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL

RE-ENTER OLD WELL

NAME OF COMPANY OR OPERATOR
El Paso Natural Gas Company

Address City State Phone Number
2 North Nevada Ave Colorado Springs CO 80903 719.520.4533

Drilling Contractor
to be determined

Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor Arizona Application to obtain Mineral Resources	Well number 1-20	Elevation (ground) 1524'
Nearest distance from proposed location to property or lease line: #08-108703 1320' feet	Distance from proposed location to nearest drilling, completed or applied-for well on the same lease: none feet	
Number of acres in lease 640	Number of wells on lease, including this well, completed in or drilling to this reservoir: none	

If lease purchased with one or more wells drilled, from whom purchased. Name Address

Well location (give footage from section lines) 1320' FNL and 1320' FEL	Section - Township - Range or Block and Survey Sec. 20, T7S, R8E, G.& S.R.M.	Dedication per A.A.C. R12-7-104(A)(3) n/a
--	---	--

Field and reservoir (if wildcat, so state) Stratigraphic Test	County Pinal
--	-----------------

Distance in miles and direction from nearest town or post office
4.5 miles northeast of Eloy Arizona

Proposed depth: 4500'	Rotary or cable tools Rotary	Approximate date work will start May 2005
--------------------------	---------------------------------	--

Bond status filed 03/02/05 Amount \$25,000	Organization Report On file Or attached <input checked="" type="checkbox"/>	Filing Fee of \$25.00 Attached <input checked="" type="checkbox"/>
---	--	---

Remarks
Stratigraphic test per Arizona Administrative code, Title 12, Chapter 7, R12-7-128

API # 02-021-20007

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the: Manager, Facility Planning of the El Paso Natural Gas (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

[Signature]
Signature

March 18, 2005
Date

Mail completed form to:
Oil and Gas Program Administrator
Arizona Geological Survey
416 W. Congress, #100
Tucson, AZ 85701-1315

Permit Number: 226
Approval Date: 4-11-2005
Approved By: SL Rainey

**STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION**

Application to Drill or Re-enter
File Two Copies

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Form No. 3

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- A registered surveyor shall show on the plat the location of the well and certify this information in the space provided.
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- Is the operator the only owner in the dedicated acreage outlined on the plat below? YES _____ NO X
- If the answer to question four is no, have the interests of all owners been consolidated by communitization agreement or otherwise? YES X NO _____ If answer is yes, give type of consolidation Arizona State Lands
- If the answer to question four is no, list all the owners and their respective interests below:

Owner <u>State of Arizona</u>	Land Description
<p style="text-align: center;">CERTIFICATION</p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p>	
<p>Name <u>Greg Gettman</u></p> <p>Position <u>Manager, Facility Planning</u></p> <p>Company <u>El Paso Natural Gas</u></p> <p>Date <u>03/18/05</u></p>	
<p>I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.</p> <p style="text-align: center;"> </p>	
<p>Date Surveyed <u>March 2, 2005</u></p> <p>Registered Land Surveyor</p> <p style="text-align: center;"><u>Gary G. Eidson</u></p> <p>Certificate No. <u>29871</u></p>	

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type
9 5/8 "	36#	K-55	0	70'	70'	19	Class "A"
7"	23#	J/K-55	0	1800'	1800'	230	Class "A"

EL PASO NATURAL GAS COMPANY
STATE #1-20 STRATIGRAPHIC TEST
DRILLING PROGRAM

926

1. Prepare the location
2. Move in and rig up drilling rig.
3. Review El Paso's safety policy and procedures and ensure all contractors have been through safety orientation.
4. Conduct safety meeting at all tour start ups.
5. Drill 12-1/4" conductor hole to approx. 60 ft. – 80 ft. ground level (GL). Run 9-5/8" conductor casing and cement to surface. Construct 6' x 6' x 6'cellar.
6. Nipple up (NU) flow line from conductor pipe to rig tanks.
7. Fill rig tanks with water. Make up (MU) spud mud.
8. Pick up (PU) 8-3/4" bit and run in the hole (RIH) to approx. 60 – 80 ft GL.
9. Drill 8-3/4" hole to approx. 1840 ft. GL, surveying approx. every 150 feet. Monitor the chloride content of the drilling fluid returns. Stop drilling at the earlier of; 1) the chloride levels in the drilling fluid exceed 30,000 mg/l or 2) upon reaching a depth of 2,000 feet.
10. Conduct a short trip and circulate the well clean. Circulate and condition mud for logging.
11. Pull out of hole (POOH) laying down the bottom hole assembly (BHA).
12. Rig up (RU) logging company, and log well per attached logging program.
13. RIH and circulate and condition mud to run casing. POOH
14. RU casing crews. Run approx. 45 joints of 7", 23.0 lb/ft, LT&C surface casing to approx. 1800 ft GL. Float shoe and float collar will be bucked onto first joint of 7" casing. Fill each joint of casing with drilling fluid as it is being run in. The centralizers will be placed as per the attached casing program.
15. MU 7" LT&C cementing head and circulate well till cementing units are rigged up. Circulate the well with the rig pumps until the cementing units are rigged up.
16. RU cementing company. Pressures test all cementing lines. Cement the 7" surface casing to surface per the cementing program.

Note: From information gathered during the drilling of the surface hole, it may become necessary to run a cementing diverter tool and cement in two stages.

Note: Notify Stephen Rauzi (520-770-3500) with the Arizona Geological Survey (Oil and Gas Administrator) 48 hours prior to cementing.

17. Wait on cement (WOC) approx. 24 hours. After 6 hours of WOC, test the float equipment. Remove the cementing head. Top off cement in the 7" x 8-3/4" annulus if necessary. After 18 hours of WOC, remove the flow line and cut off the 9-5/8" conductor pipe. Cut (at a pre-determined elevation) and lay down the 7" surface casing.
18. PU 6-1/4" bit and RIH to the float collar at approx. 1760 ft. GL. Drill out the float collar from the 7" surface casing with 6-1/4" Drill bit.
19. Pressure test the 7" casing (4360-psi Internal Yield Resistance) to 1800-psi – 1 psi/ft gradient (assuming 9.0 lb/gal mud, 1800' casing shoe (850-psi hydrostatic head) gives 2650-psi bottom hole test pressure - Does not exceed 70% of 4360 (3050-psi) and hold for 30 minutes. Use a chart recorder to record the test results. There shall not be more than a 10% drop in pressure. If so, then test must be repeated.

20. Clean surface tanks and fill with salt saturated mud.
21. Rig up mud logger.
22. Drill out cement, float shoe, wellbore cement and drill approx. 10 feet of new formation. Circulate and condition the drilling fluid.
23. Drill 6-1/4" hole, running a deviation survey (TOTCO) every 500 feet. The deviation shall be kept at a minimum and should be controlled using the BHA (stabilizer/reamer placement) and operating parameters (weight on bit (WOB) and rotary speed). Mud logger to take samples every 10 ft.
24. At first evidence of salt cuttings in the returns or as directed by El Paso site supervisor, stop drilling. Circulate hole clean. POOH with rotary bit.
25. PU 6 1/4" x 4" core bit and barrel and run into to hole to bottom.
26. Begin coring, pulling core after 30 feet. Continue coring until directed by El Paso Site Supervisor.
27. POOH with core assembly. PU 6 1/4" bit and Rih to bottom to resume drilling.
28. Drill approximately 100 feet. Mud logger to continue to take samples every 10 feet.
29. Thirty foot core samples will be taken after approximately every hundred feet of drilling until the salt body has been penetrated. The El Paso Site Supervisor may alter the core intervals depending upon samples obtained.
30. Continue to drill a 6-1/4" hole to a total depth of approx. 5000 ft., running a deviation survey (TOTCO) every 500 feet. The deviation shall be kept at a minimum (less than 100 ft from surface to TD) and should be controlled using the BHA (stabilizer/reamer placement) and operating parameters (weight on bit (WOB) and rotary speed). Mud logger to take samples every 10 ft.
31. Conduct a short trip and circulate and condition mud for logging.
32. POOH, laying down the BHA.
33. Rig up & run open-hole logs per logging program.
34. RIH and circulate out the salt saturated drilling fluid. POOH.
35. Conduct the Plug and Abandonment (P&A) program.
Note: Notify Stephen Rauzi (520-770-3500) with the Arizona Geological Survey (Oil and Gas Administrator) 48 hours prior to conducting the P&A program.
36. Lay down the drill pipe.
37. Rig down and move out the drilling rig

MUD PROGRAM

1. Spud / Freshwater Mud: Depth 0 ft. to approx 1,800 ft.

Mud Weight	8.8 – 9.2 lbs/gal
Viscosity	35 – 45 sec/qt.
Filtrate Control	< 25 cc
pH	< 9
% Solids	< 10%

Freshwater mud will consist mainly of freshwater mix with bentonite drilling clay. The mud weight and % solids can be controlled by application of good surface solids control equipment (i.e. shale shakers, desander, desilter and/or mud cleaner). The viscosity will be regulated with water, bentonite and sodium bicarbonate (soda ash). A polyanionic cellulose additive (DRISPAC) will be used to control the filtrate loss of the filter cake.

2. Saltwater Mud: Depth approx. 1,800 ft. to 4,500 ft.

Mud Weight	10.0 – 10.4 lbs/gal
Viscosity	35 – 45 sec/qt.
Filtrate Control	< 25 cc
pH	< 9
% Solids	< 10%

Saltwater mud will consist mainly of make-up brine mixed with attapulgite clay. The mud weight and % solids can be controlled by application of good surface solids control equipment (i.e. shale shakers, desander, desilter and/or mud cleaner). The viscosity will be regulated with water saturated with salt and attapulgite. A pregelatinized starch additive (IMPERMEX) will be used to control the filtrate loss of the filter cake.

To counter any potential drilling problems such as abnormal formation pressures and lost circulation, a supply of barite and loss circulation materials (LCM) will be kept on site.

The drilling fluid properties will be checked and recorded periodically during each 12 hour tower (shift). A drilling fluids engineer from a third party (Baker Inteq, Bariod, etc) will set up each of the drilling mud (freshwater and saltwater) systems and check the drilling fluid properties daily. The mud engineer will also be used as needed to deal with any problems encountered during drilling.

LOGGING PROGRAM

1. Surface Hole: Surface to Approx. 1,800 ft.

Electric Line Logging: Dual Induction Resistivity Log w/SP
Gamma Ray

Mud Logging: None

2. Interval of Interest: 1,800 ft to Approx. 4,500 ft.

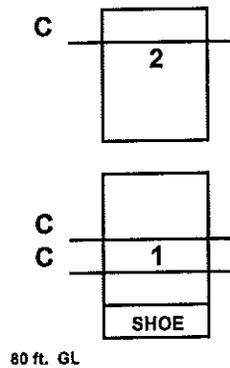
Electric Line Logging: Dual Laterolog Resistivity Log (Saltwater Mud)
Gamma Ray
Compensated Neutron (Porosity Logging)
Litho Density (Bulk Density Logging)
Combined Caliper Log
Dipole Sonic Log

Mud Logging: 10 ft Samples from 1,800 ft to 5,000 ft.

CASING PROGRAM

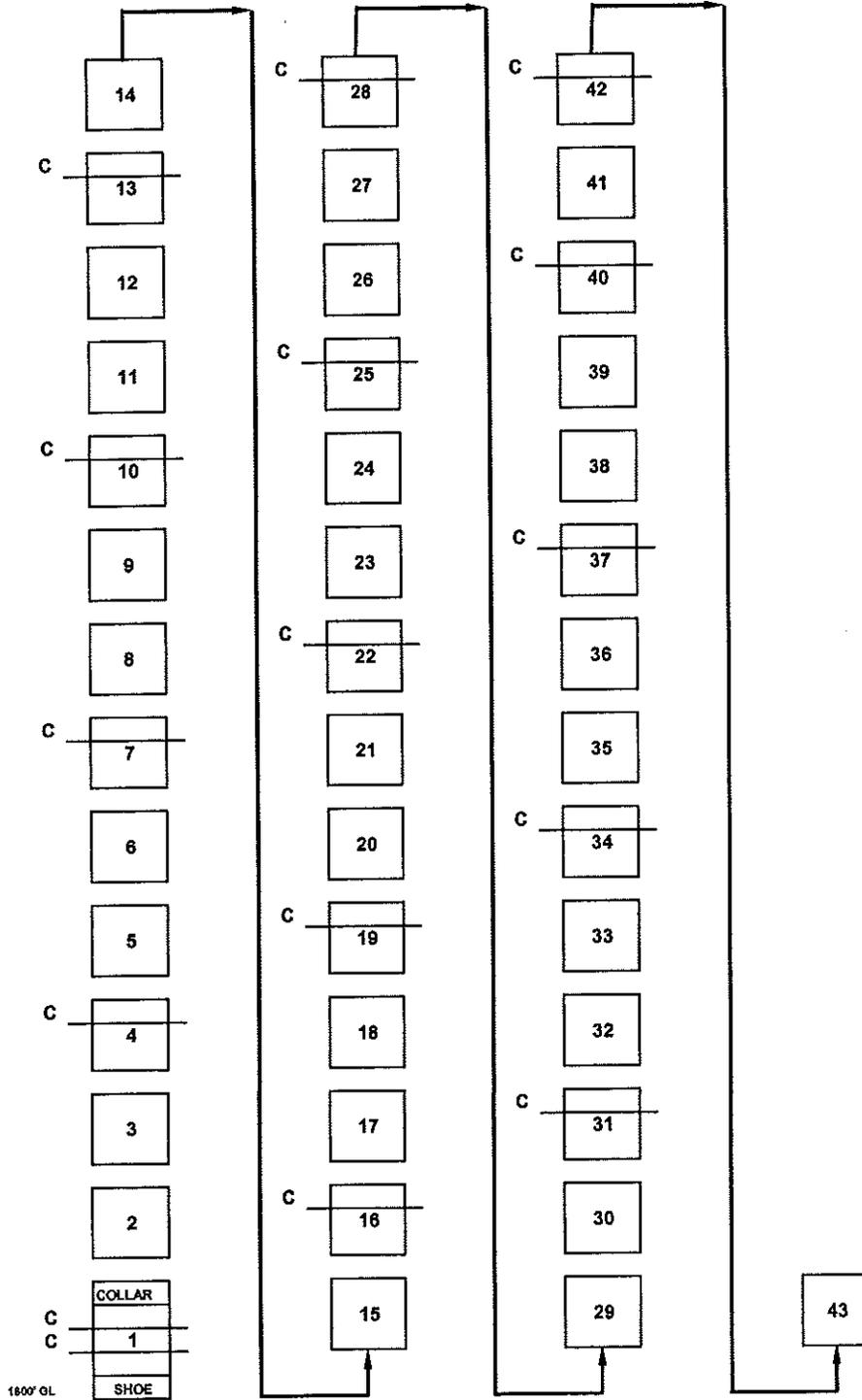
1. Conductor Casing:
12-1/4" Borehole
Surface to Approx. 80 ft.
9-5/8" - 0.352" Wall, 36.0 lb/ft, J/K-55, PE
2. Surface Casing:
8-3/4" Borehole
Surface to Approx. 1,800 ft.
7" - 0.317" Wall, 20 lb/ft, J/K-55, LT&C

Picacho Storage Project
Strat Well
9-5/8" Conductor Casing & Cementing Hardware Program



C - 12-1/4" x 9-5/8" Bow Type Centralizers

El Paso Natural Gas Company
 Picacho Storage Project
 Strat Well
 7" Casing & Cementing Hardware Program



C - 8-3/4" x 7" Bow Type Centralizers

CEMENTING PROGRAM

1. Conductor Casing:

12-1/4" x 9-5/8" Borehole - Surface to Approx. 80 ft.

$$(12.25^2 - 9.625^2) \times \pi/4 \times 1/144 = 0.3132 \text{ ft}^3/\text{ft}$$

$$80 \text{ ft} \times 0.3132 \text{ ft}^3/\text{ft} = 25 \text{ ft}^3$$

Excess: 50% of Open Hole Volume

35 sacks Standard/Class A Cement + 0.25 lbs/sack Cello Flake + 2% Calcium Chloride

Slurry Weight (lb/gal)	15.80
Slurry Yield (ft ³ /sack)	1.17
Amount of Mix Water (gal/sk)	5.00
Estimated Pumping Time	3:00
COMPRESSIVE STRENGTH	
24 hrs @ 80 ° F (psi)	4000

2. Surface Casing:

8-3/4" x 7" Borehole - Surface to Approx. 1,800 ft.

$$(8.921^2 - 7^2) \times \pi/4 \times 1/144 = 0.1668 \text{ ft}^3/\text{ft}$$

$$80 \text{ ft} \times 0.1668 \text{ ft}^3/\text{ft} = 13.3 \text{ ft}^3$$

$$(8.75^2 - 7^2) \times \pi/4 \times 1/144 = 0.1503 \text{ ft}^3/\text{ft}$$

$$1220 \text{ ft} \times 0.1503 \text{ ft}^3/\text{ft} = 183.4 \text{ ft}^3$$

$$500 \text{ ft} \times 0.1503 \text{ ft}^3/\text{ft} = 75.2 \text{ ft}^3$$

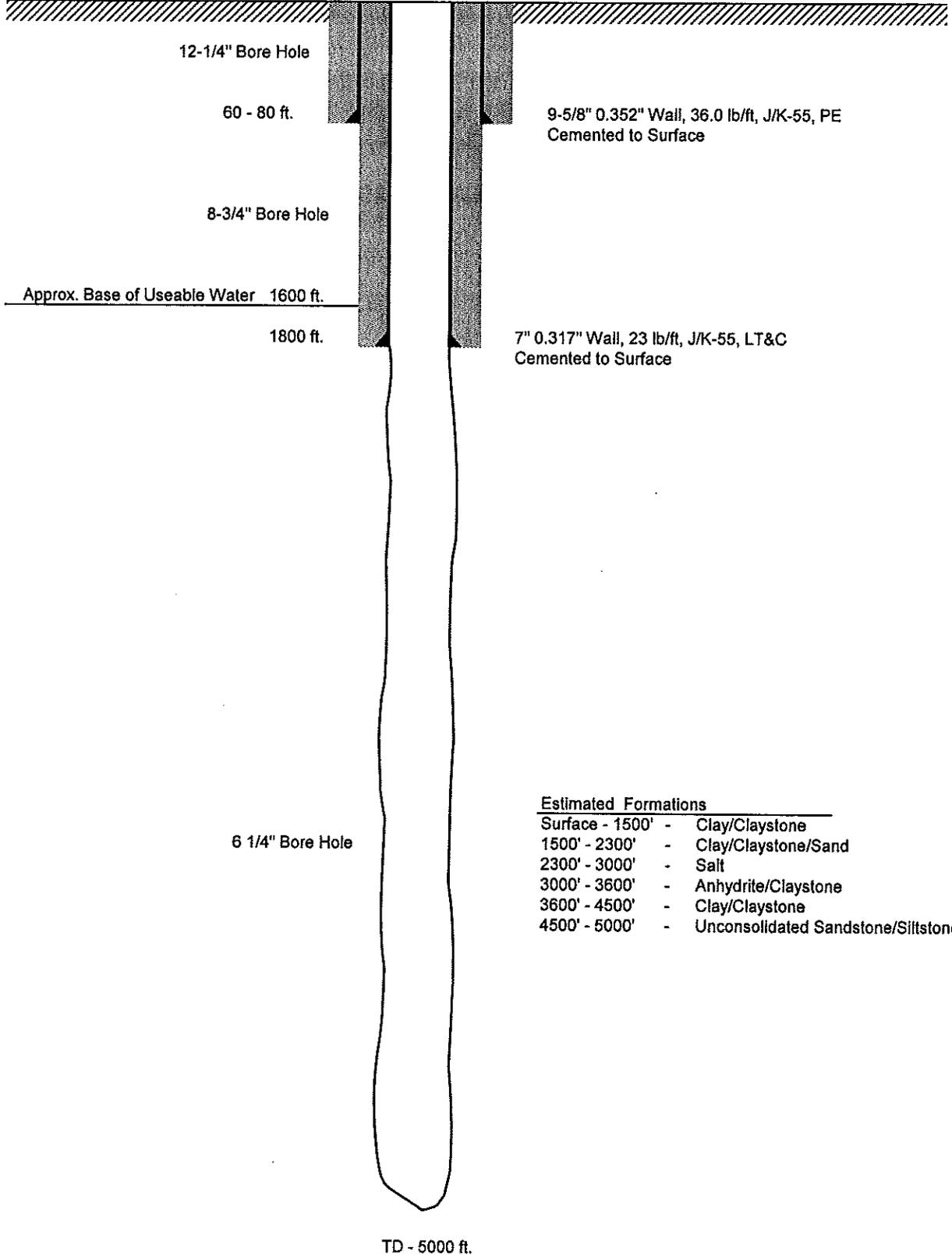
Excess: 100% of Open Hole Volume or 25% over callper

Lead Slurry: 180 sacks Standard Lite Cement + 0.25 lbs/sack Cello Flake + 2% Calcium Chloride

Tail Slurry: 130 sacks Standard/Class A Cement + 0.25 lbs/sack Cello Flake + 2% Calcium Chloride

	Lead Slurry	Tail Slurry
Slurry Weight (lb/gal)	12.00	15.80
Slurry Yield (ft ³ /sack)	2.12	1.17
Amount of Mix Water (gal/sk)	12.11	5.00
Estimated Pumping Time	5:00	3:00
COMPRESSIVE STRENGTH		
24 hrs @ 80 ° F (psi)	340	4000

All Depth from GL



PB - ENERGY STORAGE SERVICES, INC.

EL PASO NATURAL GAS COMPANY

PICACHO BASIN SLIM HOLE STRAT. WELL - ELOY, AZ.

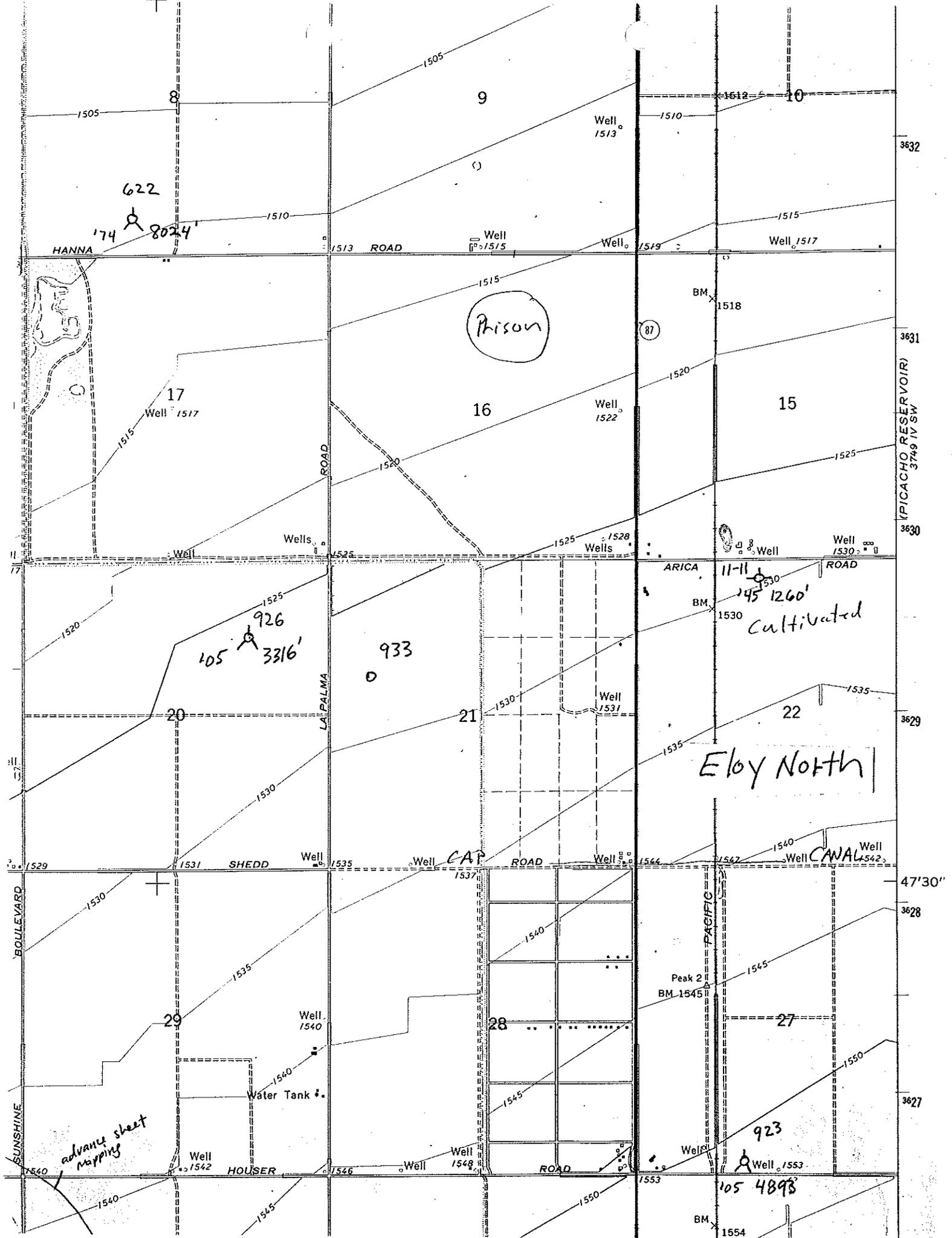
DRAWN: KB

CHECKED: KB

DATE: 3-30-05

SCALE: NONE

JOB NO. 50579A



622

174 8024'

Prison

Cultivated

Eloy North

PICACHO RESERVOIR
3749 IV SW

HANNA

17
Well 1517

105 3316'

933

ARICA

BM 1530

145 1260'

Well 1530

SUNSHINE BOULEVARD

advance sheet mapping

SHEDD ROAD

CAP ROAD

ROAD

CANAL

PACIFIC

Water Tank

Well 1542

HOUSER

Well 1548

ROAD

Well 1553

105 4893'

BM 1554

Peak 2
BM 1545

3632

3631

3630

3629

47'30"

3628

3627

9

10

8

17

16

15

20

21

22

29

28

27

923

(87)

1505

1510

1505

1510

1513 ROAD

Well 1513

Well 1513

Well 1519

Well 1517

1515

BM 1518

1520

Well 1522

ROAD

1520

1515

1525

Wells 1528

Well 1530

ROAD

1520

1525

1530

Well 1531

LA PALMA

1530

1535

1535

1529

1531

Well 1535

Well 1537

Well 1544

1540

Well 1542

1530

1535

Well 1540

1540

1545

29

28

27

1540

1545

1550

1540

1545

1550

1553

1554

EL PASO NATURAL GAS COMPANY
P.O. BOX 4430
HOUSTON, TX 77210-4430

REMITTANCE ADVICE
CHECK DATE 03/09/2005
CHECK NUMBER 07512907
VENDOR NUM F000004071

ARIZONA OIL & GAS
CONSERVATION COMMISSION
416 WEST CONTRESS SUITE 100
TUCSON, AZ 85701

RETAIN FOR YOUR RECORDS

Refer Payment Inquires to EPGTR - 713-420-4200

Voucher ID	Invoice Number	Invoice Date	Discount	Paid Amount
00224204	CKREQ050303 STATE #1-11 & #1-20 PERMITS	03/03/2005	0.00	50.00

RECEIPT		Date <u>3-21-2005</u>	No. <u>3131</u>
Received From <u>EL Paso Natural Gas Company</u>			
Address <u>PO Box 4430, Houston TX 77210</u>			
For <u>fifty and no/100</u>		Dollars \$ <u>50.00</u>	
<u>filing fee permit 925 and Permit 926</u>			
ACCOUNT		HOW PAID	
AMT. OF ACCOUNT	CASH	
AMT. PAID	CHECK	<u>50 00</u>
BALANCE DUE		MONEY ORDER	
		By <u>SL Rainz</u>	

8K806 Rediform

EL PASO NATURAL GAS COMPANY
P.O. BOX 4430
HOUSTON, TX 77210-4430

CITIBANK DELAWARE
A Subsidiary of Citicorp
One Penn's Way
New Castle, DE 19720

CHECK DATE 03/09/2005
CHECK NUMBER 07512907
62-20
311
Amount

\$50.00

***\$50.00

VOID AFTER ONE YEAR

Pay ***FIFTY AND XX / 100 US DOLLAR***

To The Order Of
ARIZONA OIL & GAS
CONSERVATION COMMISSION
416 WEST CONTRESS SUITE 100
TUCSON, AZ 85701

DH SA

Authorized Signature

07512907 031100209

38691601

ORGANIZATION REPORT

Full Name of the Company, Organization, or Individual

El Paso Natural Gas Company

Mailing Address and Phone Number

PO Box 1087 Colorado Springs CO 80944-1087 (719)473.2300

Plan of Organization (State whether organization is a corporation joint stock association, firm or partnership, or Individual Corporation)

Purpose of Organization (State type of business in which engaged)
Natural Gas Transmission

If a reorganization, give name and address of previous organization

If a foreign corporation give (1) State where incorporated Delaware	(2) Name and mailing address of state agent CT Corporation System 3225 N. Central Avenue Phoenix AZ 85012	(3) Date of permit to do business in state (AZ) May 22, 1936
Principal Officers or Partners (if partnership) NAME	TITLE	MAILING ADDRESS
James J. Cleary	President	P O Box 1087 Co Springs CO 80944 - 1087
William H. Healy, Jr.	Vice President	P O Box 1087 Co Springs CO 80944-1087
Thomas P. Morgan	Vice President	P O Box 1087 Co Springs CO 80944-1087
Catherine E. Palazzari	Vice President	P O Box 1087 Co Springs CO 80944-1087
Donald J. Zinko	Vice President	P O Box 1087 Co Springs CO 80944-1087

DIRECTORS NAME

MAILING ADDRESS

James J. Cleary	P O Box 1087 Co Springs CO 80944-1087
Greg G. Gruber	1001 Louisiana St Houston TX 77002
John W. Somerhalder II	1001 Louisiana St Houston TX 77002

CERTIFICATE I, the undersigned, under the penalty of perjury state that I am the Corporate Secretary of the El Paso Natural Gas Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Stacy L. James
Signature

2-16-05
Date

STATE OF ARIZONA

OIL & GAS CONSERVATION COMMISSION

Organization Report
File One Copy

Form No. 1

Mail completed form to
Oil and Gas Program Administrator
Arizona Geological Survey
416 W Congress., #100
Tucson, AZ 85701

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS

Bond Serial No. 23-007-048

That we: El Paso Natural Gas Company

of the County of El Paso in the State of Colorado

as principal, and Liberty Mutual Insurance Company

of 175 Berkeley Street, Boston, MA 02117

AUTHORIZED TO DO BUSINESS WITHIN THE STATE OF ARIZONA

as surety, are held and firmly bound unto the State of Arizona and the Oil and Gas Conservation Commission, hereinafter referred to as the "Commission", in the penal sum of Twenty Five Thousand and 00/100 Dollars, (\$25,000.00) lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The conditions of this obligation are that, whereas the above bounden principal proposes to drill a well or wells for oil, gas or stratigraphic purposes in and upon the following described land situated within the State, to-wit:

Sections 11 + 20 T7S, R8E Pinal County, Arizona

(May be used as blanket bond or for single well)

NOW THEREFORE, if the above bounden principal shall comply with all the provisions of the Laws of this State and the rules, regulations and orders of the Commission, especially with reference to the requirements of A.R.S. § 27-516, providing for the proper drilling, casing and plugging of said well or wells, and filing with the Oil and Gas Conservation Commission all notices and records required by said Commission, then in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, this obligation is void; otherwise it shall remain in full force and effect.

Whenever the principal shall be, and declared by the Oil and Gas Conservation Commission in violation of the Laws of this State and the rules, regulations and orders of the Commission, the surety shall promptly:

- 1. Remedy the violation by its own efforts, or
2. Obtain a bid or bids for submission to the Commission to remedy the violation, and upon determination by the Commission and the surety of the lowest responsible bidder, arrange for a contract between such bidder and the Commission, and make available as work progresses sufficient funds to pay the cost of remedying the violation; but not exceeding, including other costs and damages for which the surety may be liable hereunder, the amount set forth in the first paragraph hereof.

Liability under this bond may not be terminated without written permission of this Commission.

WITNESS our hands and seals, this 2 day of March, 20 05.

El Paso Natural Gas Company

Greg G. Gubler Senior Vice President
Principal

WITNESS our hands and seals, this 1st day of March, 20 05.

Liberty Mutual Insurance Company

Suzanne Holden, Attorney-In-Surety Fact

Countersignature Not Required

(Surety, Resident Arizona Agent
If issued in a state other than Arizona)

(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved Date 3-21-2005
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: SL Rainz

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Bond
File Two Copies
Form No. 2

Permit No. 925 + 926

**NOTICE FROM SURETY REQUIRED BY
TERRORISM RISK INSURANCE ACT OF 2002**

In accordance with the Terrorism Risk Insurance Act of 2002 (referred to hereinafter as the "Act"), this disclosure notice is provided for surety bonds on which one or more of the following companies is the issuing surety: Liberty Mutual Insurance Company; Liberty Mutual Fire Insurance Company; LM Insurance Corporation; The First Liberty Insurance Corporation; Liberty Insurance Corporation; Employers Insurance Company of Wausau (formerly "EMPLOYERS INSURANCE OF WAUSAU A Mutual Company"); Peerless Insurance Company; and any other company that is a part of or added to the Liberty Mutual Group for which surety business is underwritten by Liberty Bond Services (referred to collectively hereinafter as the "Issuing Sureties").

NOTICE FORMS PART OF BOND

This notice forms part of surety bonds issued by any one or more of the Issuing Sureties.

DISCLOSURE OF PREMIUM

The premium attributable to any bond coverage for "acts of terrorism" as defined in Section 102(1) of the Act is Zero Dollars (\$0.00).

**DISCLOSURE OF FEDERAL PARTICIPATION
IN PAYMENT OF TERRORISM LOSSES**

The United States will reimburse the Issuing Sureties for ninety percent (90%) of any covered losses from terrorist acts certified under the Act exceeding the applicable surety deductible.

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

LIBERTY MUTUAL INSURANCE COMPANY
BOSTON, MASSACHUSETTS
POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS: That Liberty Mutual Insurance Company (the "Company"), a Massachusetts stock insurance company, pursuant to and by authority of the By-law and Authorization hereinafter set forth, does hereby name, constitute and appoint

PATRICK D. DINEEN, HEIDI BOCKUS, THOMAS J. JOCHUMS, KATHIE L. WIEGERS, SUZANNE HOLDEN, THERESA A. LAMB, KRISTA M. LEE, ALL OF THE CITY OF SEATTLE, STATE OF WASHINGTON

, each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations in the penal sum not exceeding SEVENTY-FIVE MILLION AND 00/100 DOLLARS (\$ 75,000,000.00) each, and the execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents, shall be as binding upon the Company as if they had been duly signed by the president and attested by the secretary of the Company in their own proper persons.

That this power is made and executed pursuant to and by authority of the following By-law and Authorization:

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

By the following instrument the chairman or the president has authorized the officer or other official named therein to appoint attorneys-in-fact:

Pursuant to Article XIII, Section 5 of the By-Laws, Garnet W. Elliott, Assistant Secretary of Liberty Mutual Insurance Company, is hereby authorized to appoint such attorneys-in-fact as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

That the By-law and the Authorization set forth above are true copies thereof and are now in full force and effect.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Company and the corporate seal of Liberty Mutual Insurance Company has been affixed thereto in Plymouth Meeting, Pennsylvania this 16th day of December 2004.

LIBERTY MUTUAL INSURANCE COMPANY

By Garnet W. Elliott, Assistant Secretary



COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY

On this 16th day of December, 2004, before me, a Notary Public, personally came Garnet W. Elliott, to me known, and acknowledged that he is an Assistant Secretary of Liberty Mutual Insurance Company; that he knows the seal of said corporation; and that he executed the above Power of Attorney and affixed the corporate seal of Liberty Mutual Insurance Company thereto with the authority and at the direction of said corporation.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires Mar. 28, 2005
Member, Pennsylvania Association of Notaries

By Teresa Pastella, Notary Public

CERTIFICATE

I, the undersigned, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this certificate; and I do further certify that the officer or official who executed the said power of attorney is an Assistant Secretary specially authorized by the chairman or the president to appoint attorneys-in-fact as provided in Article XIII, Section 5 of the By-laws of Liberty Mutual Insurance Company.

This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the following vote of the board of directors of Liberty Mutual Insurance Company at a meeting duly called and held on the 12th day of March, 1980.

VOTED that the facsimile or mechanically reproduced signature of any assistant secretary of the company, wherever appearing upon a certified copy of any power of attorney issued by the company in connection with surety bonds, shall be valid and binding upon the company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said company, this 1st day of March, 2005.



By David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-800-832-8888 between 9:00 am and 4:30 pm EST on any business day.

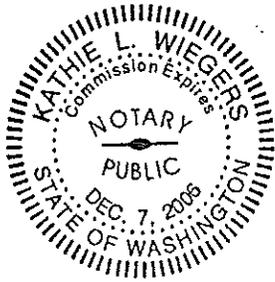
**All-Purpose
Certificate of Acknowledgment**

State of Washington
County of King }

On March 1, 2005 before me, Kathie L. Wieggers,
DATE NAME OF NOTARY PUBLIC

personally appeared Suzanne Holden
NAME(S) OF SIGNER(S)

- personally known to me - OR proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



Witness my hand and official seal.

Kathie L. Wieggers
SIGNATURE OF NOTARY PUBLIC

Though the data below is not required by law, it may prove valuable to persons relying on the document and prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

- Individual(s)
 Corporate Officer:
 Title(s)
 Partner(s)
 Attorney-in-Fact
 Trustee(s)
 Subscribing Witness
 Guardian/Conservator
 Other:

DESCRIPTION OF ATTACHED DOCUMENT(S)

Type of Document

Performance Bond

Number of Pages

Two (2)

Date of Document

March 1, 2005

Signer(s) Other Than Named Above

EI Paso Natural Gas Company

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)

Liberty Mutual Insurance Company

EL PASO NATURAL GAS

Operator: El Paso Natural Gas Company

Bond Company: Liberty Mutual Insurance

Bond No.: 23-007-048

Amount: \$25,000.00

Date of Bond: 3/2/2005

Date approved: 3/21/2005

Permits covered by this bond:

925 Plugged 9/5/05

926 Plugged 8/6/05

928 Expired, not drilled

933 TA 10/16/06

August 30, 2006

926

Mr. Steven Rauzi
State of Arizona
Oil & Gas Conservation Commission
416 West Congress
Suite 100
Tucson, AZ 85701

Re: El Paso Natural Gas Company
State #1-11 & State #1-20
Sections 11 & 20, T7S, R8E
Pinal County, AZ
AZOGCC Permits #925 & #926

Dear Mr. Rauzi:

Pursuant to the Arizona Administrative Code R12-7-121-C El Paso Natural Gas Company requests that the well completion information from the captioned wells be kept confidential for an additional two years (three years total). As you are aware El Paso Natural Gas Company is working toward the development of a salt cavern gas storage facility in Section 20, T7S, R8E, Pinal County AZ. The disclosure of this information could harm our competitive position with relation to the development of the facility and the possible need to purchase additional acreage.

Please let me know if you have any questions or concerns.

Sincerely Yours,



Greg Gettman
Manager, Facility Planning
El Paso Natural Gas Company
Office 719-520-4533
Cell 719-351-4093

Subject: Re: Picacho Reservoir well
From: Steve Rauzi <steve.rauzi@azgs.az.gov>
Date: Tue, 16 May 2006 08:57:17 -0700
To: Tom Shaw <thshaw@msn.com>

926

Yes, El Paso permitted the 1-21 hole in 21-7s-8e in March. El Paso has not yet started drilling. I've attached a copy of this permit, number 933. Steve

Tom Shaw wrote:

Last question, have any other permits been issued for deep tests in the Eloy area? If so, can I get a copy(s)?

From: Steve Rauzi [mailto:steve.rauzi@azgs.az.gov]
Sent: Tuesday, May 16, 2006 10:08 AM
To: Tom Shaw
Subject: Re: Picacho Reservoir well

Tom, Here is the approved permit 926 for the El Paso 1-20 well. El Paso finished drilling the 1-20 in August 2005. By the way, I need to correct an error in my previous email: El Paso finished drilling the 1-11 well in September 2005 not 2006. Steve

Tom Shaw wrote:

Thanks. Can I also get a copy of the permit for the well they drilled on State lands over behind the prison?

T-

From: Steve Rauzi [mailto:steve.rauzi@azgs.az.gov]
Sent: Monday, May 15, 2006 5:35 PM
To: Tom Shaw
Subject: Re: Picacho Reservoir well

Hi Tom, Here's the approved permit 925 for the El Paso 1-11 well south of the Picacho Reservoir. El Paso finished drilled the 1-11 in September 2006 and the completion report will be confidential for one year from that date in accordance with R12-7-121(C). Steve

Tom Shaw wrote:

Steve,

Can I get scanned copies of the well permit and completion report for the well drilled by El Paso just south of the Picacho reservoir? I believe it was Sec. 10, or 12, on State lands.

Tom

--

No virus found in this outgoing message.

Checked by AVG Free Edition.

Version: 7.1.392 / Virus Database: 268.5.6/339 - Release Date: 5/14/2006

Subject: Re: Picacho Reservoir well
From: Steve Rauzi <steve.rauzi@azgs.az.gov>
Date: Tue, 16 May 2006 08:32:23 -0700
To: Tom Shaw <thshaw@msn.com>

926

Yes

Tom Shaw wrote:

Ok.

Just to be sure I'm clear, the 1-20 data is confidential until August 2006 and the 1-11 will be confidential until September 2006?

From: Steve Rauzi [mailto:steve.rauzi@azgs.az.gov]
Sent: Tuesday, May 16, 2006 10:08 AM
To: Tom Shaw
Subject: Re: Picacho Reservoir well

Tom, Here is the approved permit 926 for the El Paso 1-20 well. El Paso finished drilling the 1-20 in August 2005. By the way, I need to correct an error in my previous email: El Paso finished drilling the 1-11 well in September 2005 not 2006. Steve

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Sent: Monday, May 15, 2006 5:35 PM
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Subject: Re: Picacho Reservoir well

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Can I get scanned copies of the well permit and completion report for the well drilled by El Paso just south of the Picacho reservoir? I believe it was Sec. 10, or 12, on State lands.

Tom

--

No virus found in this outgoing message.

Checked by AVG Free Edition.

Version: 7.1.392 / Virus Database: 268.5.6/339 - Release Date: 5/14/2006

Re: Salt and drilling info

Subject: Re: Salt and drilling info
From: Tom.Zuppan@cityofmesa.org
Date: Wed, 31 Aug 2005 10:24:00 -0700
To: Steve Rauzi <steve.rauzi@azgs.az.gov>

926

Thank you. Both documents came through. I'll be in touch if I have any additional questions.

Tom F. Zuppan
Environmental Specialist
City of Mesa
Environmental Programs
480.644.6970 - Phone
480.694.6929 - Cell
480.644.4774 - Fax
tzuppan@cityofmesa.org

Salt and drilling info

Subject: Salt and drilling info
From: Steve Rauzi <Steve.Rauzi@azgs.az.gov>
Date: Wed, 31 Aug 2005 10:20:55 -0700
To: Tom.Zuppan@cityofmesa.org

Tom: I have attached the two issues of Arizona Geology that we talked about, Steve

<AZhassalt.pdf>
<Wanttodrill.pdf>

8-31-05 Tom called with questions about permitting strat tests and injection wells. ADWR or ORCC? EPA & ADEQ involvement etc. Role of FERC.

August 26, 2005

Mr. Steven Rauzi
Oil and Gas Administrator
Arizona Geological Survey
416 West Congress, Suite 100
Tucson, AZ 85701

926

Re: El Paso Natural Gas Company
State #1-20
AOGCC Permit #926

Dear Steve:

Attached for your records are the Well Completion Report and Well Log (Form 4) and the Plugging Record (Form 10). Also attached for pursuant to AAC R12-7-121 is the following information:

- 1 Drill Time and Cuttings Log
- 1 Core Log
- 1 Set of Core Photos
- 1 Set of Welenco Geophysical Logs (94' to 1,848') consisting of:
 - Dual Induction Gamma Ray
 - Electric, Gamma, Temperature
 - 4-Arm Caliper
 - Drift Survey
- 1 Set of Schlumberger Geophysical Logs (1,815' to 3,346') consisting of:
 - Triple Lithology Density & Compensated Density *Neutron*
 - Natural Gamma Ray Spectroscopy
 - High Resolution Laterallog
 - Anistrophy DSI
 - Formation Evaluation Summary *preliminary*
- 7 Boxes of Drill Cuttings from 90' to 3,320'

El Paso Natural Gas Company requests in that this information be keep confidential as provided in Arizona Administrative Code R12-7-121 Subsection C.

Sincerely,



Greg Gettman
Manager, Facility Planning
El Paso Natural Gas

Subject: FW: Arizona Project
From: "Gettman, Greg W" <Greg.Gettman@ElPaso.com>
Date: Tue, 05 Jul 2005 16:46:00 -0600
To: Steve Rauzi <steve.rauzi@azgs.az.gov>

Steve,

Hope this helps.

926

Greg Gettman
Manager, Facility Planning
El Paso Corporation
Western Pipelines
Office (719) 520-4533
Fax (719) 520-3792
Cell (719) 351-4093
greg.gettman@elpaso.com

From: Jim Lingafelter [mailto:Jim.Lingafelter@brammer.com]
Sent: Tuesday, July 05, 2005 4:15 PM
To: Gettman, Greg W
Subject: FW: Arizona Project

[Jim Lingafelter] The drill cuttings and the brine water were transported to Allied-SW Regional Landfill in Buckeye, Az, which is close to the site location.

Allied SW Regional Landfill
24427 South Highway 85
Buckeye, Az 85326
Tel # 623-393-0085

My contact there is Fred Hays. His number is 602-478-6040

The profiles are still in place under Diversified Transportation, Inc.
They can be renewed very easily by me. It would save you substantial costs rather than maybe sending the waste to another location or another landfill. Cost wise to you, it was the cheapest on the disposal and transportation to go to SW Regional.

This email and any files transmitted with it from the El Paso Corporation are confidential and intended solely for the

June 29, 2005

Mr. Steven Rauzi
Oil and Gas Program Administrator
Arizona Geological Survey
416 W. Congress #100
Tucson, AZ 85701-1315

926

Re: State #1-20
AOGCC Permit #926

Dear Mr. Rauzi:

Attached for your review is the Application to Plug and Abandon the planned El Paso Natural Gas Company, State #1-20 Stratigraphic Test. If you have any questions or problems with the attached form or procedure, please give me a call at (719) 520-4533.

Sincerely,



Greg Gettman
Manager, Facility Planning

Subject: Re: State #1-20

From: Steve Rauzi <Steve.Rauzi@azgs.az.gov>

Date: Wed, 29 Jun 2005 09:28:00 -0700

To: "Gettman, Greg W" <Greg.Gettman@ElPaso.com>

926

Greg: It would be appropriate and save time later on to submit the app to P&A. I have attached the forms you'll need. Form 9 Application to PA, Form 10 Plugging Record, and Form 4 Completion Report.

Gettman, Greg W wrote:

Steve,

Wanted to let you know that Stewart Brothers Drilling has put us off for another week on drilling the State #1-20. It now looks like we will move in on approximately July 7th and spud on July 8th.

Is it appropriate for me submit our Application to Plug and Abandon prior to drilling the State #1-20 stratigraphic test well, as it is our intention to P&A after we complete logging the well? If so, do I submit our proposed procedures on the Sundry Notice Form or does the AOGCC have another form that you could e-mail?

Thanks,
Greg Gettman
Manager, Facility Planning
El Paso Corporation
Western Pipelines
Office (719) 520-4533
Fax (719) 520-3792
Cell (719) 351-4093
greg.gettman@elpaso.com

This email and any files transmitted with it from the ElPaso Corporation are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender.

June 7, 2005

Mr. Steven Rauzi
Oil and Gas Program Administrator
Arizona Geological Survey
416 W. Congress #100
Tucson, AZ 85701-1315

926

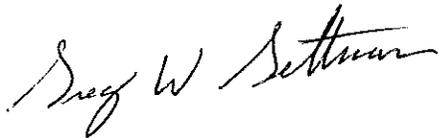
Re: State #1-20
AOGCC Permit #926

Dear Mr. Rauzi:

Attached for your review and approval are two copies of the revised Application for Permit to Drill or Reenter for the State #1-20. The only change from the original application is that the well site has been moved to 100' to the west and 20' to the north to avoid saturated soils at the originally proposed location. The new location is 1,420' FEL and 1,300' FEL, Section 20, T7S, R8E, Pinal County, Arizona.

Due to problems with Stewart Brothers rig availability; we are now looking at commencing drilling operations in late June. If you have any questions or problems with the attached materials, please give me a call at (719) 520-4533.

Sincerely,



Greg Gettman
Manager, Facility Planning

Subject: Re: El Paso Eloy Stratigraphic Test Wells Update

From: Steve Rauzi <Steve.Rauzi@azgs.az.gov>

Date: Thu, 26 May 2005 09:25:42 -0700

To: "Gettman, Greg W" <Greg.Gettman@ElPaso.com>

926

Greg, Thanks for the update. You will need to file an amended application for permit to drill and plat per R12-7-105 (rules attached). The permit and API numbers will stay the same.
Steve

Gettman, Greg W wrote:

Mike, Gary & Steve,

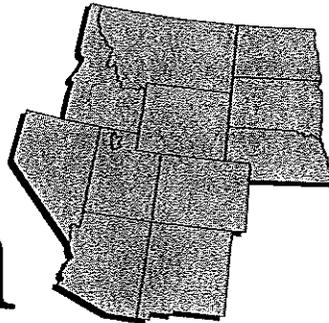
This e-mail is to update Arizona State Lands and the Oil and Gas Conservation Commission on the status of the El Paso Natural Gas Company State #1-11 and State #1-20 stratigraphic test wells. We have completed dirt work for the construction the drill site for the State #1-20. Due to saturated soils from nearby irrigated fields we moved the Section #1-20 drilling location and approximately 100' to the west and 20' to the north, the drill site remains with in the 400' by 400' work area laid out in in our State Lands Plan of Operation. As soon as I get the revised site surveyed I will be filing an amended location plat with Arizona Oil and Gas Commission and State Lands with the #1-20 well located 1,420 FEL, 1,300 FNL Section 20, T7S, R8E. We plan to start dirt work on the road and drill site today for the State #1-11 today.

Unfortunately, Stewart Brothers has pushed back our start date for drilling to late June, due to third parties not releasing their drilling equipment. As soon as I have a spud date for the first well, I will provide the necessary notifications. Please let me know if you have any questions or concerns.

Greg Gettman
Manager, Facility Planning
El Paso Corporation
Western Pipelines
Office (719) 520-4533
Fax (719) 520-3792
Cell (719) 351-4093
greg.gettman@elpaso.com

This email and any files transmitted with it from the ElPaso

Rocky Mountain



April 19, 2005 Volume 78 Number 75

926

Wyoming Edition

EPNG planning stratigraphic tests southeast of Phoenix Arizona

EL PASO Natural Gas Co (EPNG) has plans to drill two 4500-ft stratigraphic tests in southern Arizona near the town of Eloy southeast of Phoenix.

Both of the Pinal County ventures—the 1-20 State, c ne 20-7s-8e, and three and a half miles to the northeast—1-11 State, sw ne 11-7s-8e—are designed to evaluate the potential for gas storage in the area of the company's interstate pipelines.

In 2003, EPNG purchased Copper Eagle Gas Storage LLC, which was developing a gas storage project near Luke Air Force Base west of Phoenix (RMRR 8-27-03). The company notes that the Luke salt deposit near Phoenix extends nearly 10,000 ft deep. EPNG's plans call for up to three underground

storage caverns for a maximum storage capacity of 9.6 billion cu ft of gas.

A little more than two miles southeast of the 1-20 State, Unocal Picacho Peak Gas Storage

LLC earlier this year scheduled a 5000-ft stratigraphic test at the 1-27 City of Mesa in se sw 27-7s-8e (RMRR 1-11-05). The latter project also is designed to evaluate gas storage potential.

Paleozoics test slated for Colorado's Fort Collins field

WELLINGTON OPERATING Co, Englewood, Colorado, has applied for a drilling permit for a 6250-ft test of the Permian Lyons about a mile north of Fort Collins in northeastern Colorado's Fort Collins field.

Designated the 1 Kixx, se nw 19-8n-68w, eastern Larimer County, the venture will be

drilled in an area of Muddy and J sand production above 4600 ft in the field. The nearest Lyons producer is three quarters of a mile to the east-southeast, on the field's eastern flank. That well, the 13-20 Peterson in nw sw 20-8n-68w, was completed in 1979 by Crystal Exploration &

(Continued on following page)

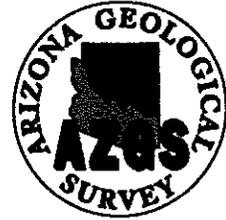




Janet Napolitano
Governor

State of Arizona
Arizona Geological Survey

416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500
www.azgs.az.gov



Larry D. Fellows
Director and State Geologist

April 11, 2005

Mr. Greg Gettman
Manager Facility Planning
El Paso Natural Gas Company
2 North Nevada Ave
Colorado Springs CO 80903

Re: El Paso #1-11 State, Sec. 11-7s-8e, Pinal Co., Permit 925
El Paso #1-20 State, Sec. 20-7s-8e, Pinal Co., Permit 926

Dear Mr. Gettman:

I have enclosed a copy of approved blanket performance bond 23-007-048, approved applications to drill #925 & #926, permits to drill #925 & #926, and filing-fee receipt 3131.

The referenced applications are approved on the condition that El Paso Natural Gas Company conduct its operations in compliance with all applicable statutes and rules of the State of Arizona and that El Paso Natural Gas Company or its designated representative *notify me at least 48 hours* before you:

- Move in drilling equipment and commence operations, and
- Run and cement surface casing

An operator shall post a sign at the well site pursuant to A.A.C. R12-7-106 and submit drilling samples and all other well data and information pursuant to A.A.C. R12-7-121. Several Sundry Notice forms are enclosed for your use in reporting all pertinent drilling and testing activity to the Oil and Gas Conservation Commission of the State of Arizona. Daily drilling reports shall detail the spud date and daily progress (depth) and status of the well and shall be submitted to the Commission at the letterhead address on a weekly basis through the completion of operations. Thank you.

Sincerely,

Steven L. Rauzi
Oil & Gas Administrator

Enclosures

c J. Dale Nations, Chairman, Oil and Gas Conservation Commission
Larry D. Fellows, Director and State Geologist

April 7, 2005

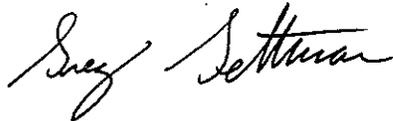
Mr. Steven Rauzi
Oil and Gas Program Administrator
Arizona Geological Survey
416 W. Congress #100
Tucson, AZ 85701-1315

926

Dear Mr. Rauzi:

Attached for your review and approval are two copies of the drilling prognoses for the proposed El Paso Natural Gas Company State #1-11 and #1-20 stratigraphic tests in Pinal County, Arizona. If you have any questions or problems with the attached materials, please give me a call at (719) 520-4533.

Sincerely,



Greg Gettman

Manager, Facility Planning
El Paso Natural Gas Company

March 18, 2005

Mr. Steven Rauzi
Oil and Gas Program Administrator
Arizona Geological Survey
416 W. Congress #100
Tucson, AZ 85701-1315

Dear Mr. Rauzi:

El Paso Natural Gas Company is requesting authority to drill two stratigraphic tests on Arizona State Lands in Pinal County, Arizona under Mineral Exploration Permits in May and June of this year. Attached for your review and approval are:

1. Application for Permit to Drill or Re-Enter in duplicate for the proposed State 1-11.
2. Application for Permit to Drill or Re-Enter in duplicate for the proposed State 1-~~11~~²⁰.
3. A check for \$50.00 to cover the filing fee for both applications.
4. An Organization Report for El Paso Natural Gas Company.
5. A \$25,000 Blanket Performance Bond.

If you have any questions or problems with the attached materials, please give me a call at (719) 520-5433 to discuss. Thanks for your consideration of this proposed work.

45

Sincerely,



Greg Gettman

Manager, Facility Planning
El Paso Natural Gas Company