DZ 17/2014

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e-mail Address

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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

		ADMINIO I IVALIALI	AFFEIGATION CHECKE	
THI	S CHECKLIST IS MA		APPLICATIONS FOR EXCEPTIONS TO DIVISION SING AT THE DIVISION LEVEL IN SANTA FE	RULES AND REGULATIONS
Applica	tion Acronyms			
•	[NSL-Non-Stan [DHC-Down [PC-Po	ndard Location] [NSP-Non-Stanhole Commingling] [CTB-Le ol Commingling] [OLS - Off-I [WFX-Waterflood Expansion]	ndard Proration Unit] [SD-Simultaned ease Commingling] [PLC-Pool/Lease Lease Storage] [OLM-Off-Lease Mea [PMX-Pressure Maintenance Expans I] [IPI-Injection Pressure Increase] Certification] [PPR-Positive Product	e Commingling] asurement] sion]
[1]	TYPE OF AP [A]	PLICATION - Check Those V Location - Spacing Unit - Sim NSL NSP		
	Check [B]	One Only for [B] or [C] Commingling - Storage - Mea DHC CTB	asurement PLC PC OLS OLN	¹ Apache
	[C]	Injection - Disposal - Pressure WFX X PMX	e Increase - Enhanced Oil Recovery SWD IPI EOR PPI	Empire Abo Unit 20
	[D]	Other: Specify	R-4549	
[2]	NOTIFICATI [A]	-	x Those Which Apply, or Does Not A erriding Royalty Interest Owners	<u> </u>
	[B]	X Offset Operators, Leaseh	nolders or Surface Owner	
	[C]	X Application is One Which	ch Requires Published Legal Notice	Marine Annual Control of the Control
	[D]	X Notification and/or Cond U.S. Bureau of Land Management - C	current Approval by BLM or SLO ommissioner of Public Lands, State Land Office	3 D ()
	[E]	X For all of the above, Pro	of of Notification or Publication is Atta	% →
	[F]	☐ Waivers are Attached		
[3]		CURATE AND COMPLETE ATION INDICATED ABOVE	INFORMATION REQUIRED TO 1 E.	PROCESS THE TYPE
	al is <mark>accurate</mark> a	nd complete to the best of my l	e information submitted with this applications in a information submitted with this applications are submitted to the Division.	
	Note:	Statement must be completed by a	n jrjdividual with managerial and/or superviso	ry capacity.
Brian	Wood	1276484	Consultant	2-13-14
Print or	Type Name	Signature	Title	Date
			en gewennen der gew	

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

1.	PURPOSE: Secondary Recovery XXX Pressure Maintenance Disposal Storage Application qualifies for administrative approval? Yes No
II.	OPERATOR: APACHE CORPORATION
	ADDRESS: 303 VETERANS AIR PARK LANE, SUITE 3000, MIDLAND, TX 79705
	CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: 505 466-812
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project? XXX Yes If yes, give the Division order number authorizing the project: R-4549 et al
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including: Empire Abo Unit 202
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted)
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: BRIAN WOOD TITLE: CONSULTANT
	NAME: BRIAN WOOD SIGNATURE: DATE: FEB. 13, 2014
*	E-MAIL ADDRESS: brian@permitswest.com If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.
	Please show the date and circumstances of the earlier submittal:

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

Side i		H (oLe I	ION WEEL DINING	313 X		
OPERATOR:	PACHE CORPORATION					
WELL NAME & N	UMBER:EMPIRE ABO	UNIT 202				
WELL LOCATION	: 2490 FNL & 1299 F	?EL	Н	1	18 S	27 E
	FOOTAGE LOCATIO	N	UNIT LETTER	SECTION	TOWNSHIP	RANGE
<u>WE</u>	LLBORE SCHEMATIC			WELL CO Surface O	ONSTRUCTION D. Casing	<u>4TA</u>
	1 555555 555 11	5/8" 24# in 1" hole @ 1,000' DC = GL (circulated)	Cemented with:	350 sx.	or	ft ³
				<u>Intermediat</u>	e Casing	
	7-7/8" h	4# & 15.5# in ole @ 6,296'	Hole Size:		Casing Size:	
	10C = GL	(circulated)		SX.		
			Top of Cement:		Method Determine	ned:
will set pack @ ≈5,56				Production	Casing	
will set		perforated	Hole Size:	7-7/8"	Casing Size:	5-1/2"
3-1/2" tbg @ ≈5,614'	5,61 = 5,87	4' - 5,793' '0' - 6,130'	Cemented with:	1,550 sx.	or	ft ³
	6,17	1' - 6,161' 6' - 6,206'	Top of Cement:	SURFACE	Method Determi	ned: CIRCULATED
will add perfs between existing	6,25	0' - 6,260'	Total Depth:	6,296'		
perfs	333333333			Injection 1	Interval	
	TD 6,296'			5,614' feet	to_6,260'	
	(not to scale)			(Perforated or Open H		1

INJECTION WELL DATA SHEET

Tul	oing Size: _	3-1/2"	Lining Material:	TUBOSCOPE TK	FIBER	
Ту	pe of Packer:	ARROW AS-1X			-	
Pac	cker Setting	Depth: ≈5,564'				
Otl	ner Type of	Tubing/Casing Seal (if a	applicable):			
			Additional Data			
1.	Is this a n	ew well drilled for inject	tion?Y	es <u>xxx</u> No		
	If no, for	what purpose was the we	ell originally drilled? OIL	WELL		
2.	Name of t	the Injection Formation:	ABO			
3.	Name of I	Field or Pool (if applicat	ole): EMPIRE; ABO (220	040)		
4.	Has the wintervals a	rell ever been perforated and give plugging detail,	in any other zone(s)? List a i.e. sacks of cement or plug	Il such perforated (s) used. ONLY PE	RFORATED IN	ABO
	5614' -	- 5793', 5870' -	6130', 6141' - 616	1', 6176' - 62	206', & 6250	- 6260
5.		-	oil or gas zones underlying o		oosed	
	OVER:	YESO (3525'), GLO	ORIETA (3375'), SAN	ANDRES (1950	'),	
	GRAYBUI	RG (1550'), QUEEN	(1150')			
	UNDER:	MORROW (9594')				

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I. Purpose is to convert a 6,296' deep Empire; Abo oil well to a water injection well. Injection may occur in the entire Abo shale – reef interval (from 5,614' to 6,260'). The well operated as a gas injection well in 1995. This is the Empire; Abo Pool (NMOCD pool code 22040). It would be the 25th injection well in the unit. Previous injection well rules or orders are R-4549 and PMX-55, PMX-58, PMX-61, PMX-62, PMX-65, PMX-73, PMX-116, PMX-188, PMX-269, and PMX-270. There have also been 4 saltwater disposal wells in the unit.

II. Operator: Apache Corporation (OGRID #873)

Operator phone number: (432) 818-1926

Operator address: 303 Veterans Air Park Lane, Suite 3000

Midland, TX 79705

Contact for Application: Brian Wood (Permits West, Inc.)

Phone: (505) 466-8120

III. A. (1) Lease: BLM lease NMNM-557371

Lease Size: 440.3 acres (see Exhibit A for C-102 and maps)

Unit Size: 11,339.15 acres

Unit Number: 300117 (BLM: NMNM-070945X)

Closest Lease Line: 170' Closest Unit Line: 2,711'

Lease: Lots 1 - 3, S2N2, & SW4 Section 1, T. 18 S., R. 27 E.

A. (2) Surface casing (8-5/8", 24#, K-55) was set in 1976 at 1,000' in an 11" hole. Casing was cemented with 250 sacks Class C + 4% gel + 2% CaCl₂ + 6 pounds per sack salt + ¼ pound per sack Flocele followed by 100 sacks Class C + 2% CaCl₂ + 6 pounds per sack salt. Circulated 25 sacks to the surface.

Production casing (5-1/2", 14# & 15.5#, J-55) was set at 6,296' (TD) in a 7-7/8" hole. PBTD = 6,270'. DV tool was set at 4,009'. Cemented first stage with 550 sacks 50/50 Class C Poz mix+ 2% gel + 8 pounds per sack salt + 0.6% D-31 + 5 pounds per sack gilsonite



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- + 1/4 pound per sack cello flake. Circulated 75 sacks to surface. Followed with 900 sacks light + 8 pounds per sack salt followed by 100 sacks Class C + 8 pounds per sack salt. Circulated 70 sacks.
- A. (3) Tubing will be 3-1/2", J-55, 9.3#, 8 rd EUE with turned down couplings coated with Tuboscope® TK fiber line. Setting depth will be 5,589'. (Highest perforation is at 5,614'.)
- A. (4) An Arrow AS-1X packer will be set at 5,564' (50' above the highest perforation of 5,614').
- B. (1) Injection zone will be the Abo, which is part of the Empire; Abo Pool (NMOCD pool code number 22040).
- B. (2) Injection interval will be 5,614' to 6,260'. The entire well bore is cased.
- B. (3) Well was drilled in 1976 as an Empire; Abo oil well. Production in the first 11 months of 2013 averaged 4 Mcfd. No oil was produced in 2013. The well has cumulatively produced 275,944 barrels of oil and 1,226,444 Mcf of gas from 5 different Abo intervals. See Exhibit B for current well bore status.
- B. (4) Apache will drill out to 6,270'. The injection interval will be perforated with 4 shots per foot. Shot diameter = 0.42". Existing open perforations are 5,998' 6,180'. Perforation history (all Abo) is:

May 1976: perforated 6141' – 6161'
April 1979: squeezed above perforations with 150 sacks
April 1979: perforated 6250' – 6260'
November 1992: perforated 6176' – 6206'
February 1994: perforated 6141' – 6161'
March 1994: perforated 5870' – 6130'
January 2002: perforated 5614' – 5793'



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B. (5) Higher and lower potential oil or gas zones in the area of review that have produced are:

Queen Grayburg San Andres Glorieta Yeso *Abo* Morrow

- IV. This is an expansion of an existing injection project. There are 3 other active Abo injection wells currently in the unit. Cumulative injection through November 30, 2013 in those wells is 33,880,952 barrels. Converting this oil well to an injection well will improve unit economics and positively affect existing production within the Empire Abo Unit.
- V. Exhibit C shows 37 existing wells (31 producing oil or gas + 5 plugged & abandoned + 1 water injection) within a half-mile radius. Exhibit D shows 651 existing wells (382 producing oil or gas + 245 plugged & abandoned + 21 water injectors or disposals + 3 water wells) within a two-mile radius.

Exhibit E shows all leases and lessors (only State and BLM) within a half-mile. Exhibit F shows all leases and lessors (only State and BLM) within a two-mile radius. Details on the leases within a half-mile are:

T. 17 S., R. 27 E.	Lessor	Lease Number	Lessee
SESE Sec. 36	NMSLO	B007520004	Mewbourne
SWSE Sec. 36	NMSLO	E053130000	Chevron
T 400 D 0T T			,
<u>T. 18 S., R. 27 E.</u>	Lessor	Lease Number	<u>Lessee</u>
Lots 1-3, S2N2, & SW4 Sec. 1	BLM	NMNM-557371	Apache
SE4 Sec. 1	BLM	NMNM-016788	ExxonMobil
T. 18 S., R. 28 E.	Lessor	Lease Number	Lessee
Lot 4 Sec. 6	NMSLO	OG4307-2	Altura Occidental



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SENW, NESW, & Lots 5 & 6 Sec. 6 NM

NMSLO

B11594-4

BP

Lot 7 Sec. 6

NMSLO

E7179-1

ConocoPhillips

VI. Thirty of the 37 existing wells that are within a half-mile penetrated the Abo. Twenty-eight of the 30 penetrators are Abo wells, 1 is a deeper SWD well, and 1 is a deeper gas well. Four of the Abo well penetrators are plugged and abandoned. Closest Abo well is a producer (203) is 608' east. A table abstracting construction details and history of all 30 penetrators and diagrams of the 4 plugged penetrators are in Exhibit G.

The 37 existing wells and 2 approved, but not yet drilled, wells that are within a half-mile (regardless of depth) are:

API	Operator	WELL	Status	Section	Township	Range	TVD	Zone(s)	Distance (feet)
3001522656	Apache	EAU 203	٥,	1	18.0\$	27E	6225	Empire; Abo	608
3001527163	Mewbourne	Chalk Bluff Fed. Com 3	G _.	1	18.05	27E	10150	Illinois Camp; Morrow, North (Gas)	790
3001500711	Apache	EAU 020C	0.5	1	18.05	27E	6218	Empire; Abo	815
3001533473	Apache	AAO Fed. 7	0.	1	18.05	27E	4100	Red Lake; Queen - Grayburg - SA	823
3001500709	Apache	EAU 019C	Р&А	1	18.05	27E	6205	Empire; Abo	858
3001522657	Apache	EAU 193	0	1	18.05	27E	6225	Empire; Abo	927
3001500697	ВР	EAU 020K	P&A	1	18.05	27E	6185	Empire; Abo	973
3001500696	Apache	EAU 019Q	0,	1	18.05	27E	6180	Empire; Abo	988



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3001521873	Apache	EAU 191A	0	1	18.0S	27E	6350	Empire; Abo	1187
3001521552	Apache	EAU 191	0	1	18.05	27E	6259	Empire;	1207
3001539898	Apache	EAU 412	no spud	1	18.05	27E	6300	Empire; Abo	1264
3001533784	Apache	AAO Fed. 8	O.	1	18.05	27E	4310	Red Lake; Queen - Grayburg - SA	1279
3001521553	Apache	EAU 201	o	1	18.05	27E	6225	Empire; Abo	1285
3001522658	Apache	EAU 194	0	1	18.05	27E	6325	Empire; Abo	1454
3001523116	Apache	EAU 213	0	6	18.05	28E	6242	Empire; Abo	1469
3001532310	Apache	AAO Fed.	O	1	18.05	27E	4100	Red Lake; Queen - Grayburg - SA	1528
3001522559	Apache	EAU 184	O;	1	18.05	27E	6200	Empire; Abo	1548
3001522637	Apache	EAU 212	0:	6	18.05	28E	6267	Empire; Abo	1707
3001539899	Apache	EAU 413	no spud	1	18.05	27E	6300	Empire; Abo	1868
3001534576	Apache	AAO Fed. 10	0	1	18.05	27E	4000	Red Lake; Glorieta Yeso, NE	1885
3001501215	Apache	EAU 020D	0	1	18.05	27E	6118	Empire; Abo	1924
3001521792	Apache	EAU 182	O,	1	18.05	27E	6369	Empire; Abo	1939
3001520394	ARCO	EAU L 019	P & A	1	18.0S	27E	6300	Empire; Abo	1957
3001500708	Apache	EAU 019B	0	1	18.0S	27E	6078	Empire; Abo	1961
3001500706	Apache	EAU 018A	O	1	18.05	27E	6087	Empire; Abo	1984



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APACHE CORPORATION EMPIRE ABO UNIT 202 2490' FNL & 1299' FEL SEC. 1, T. 18 S., R. 27 E. EDDY COUNTY, NEW MEXICO

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3001534071	Apache	AAO Fed.	0	1	18.0\$	27E	4000	Red Lake; Queen - Grayburg - SA	2023
3001500699	Apache	EAU 020B	0	1	18.05	27E	6250	Empire; Abo	2025
3001502619	Apache	EAU 021C	0	6	18.05	28E	6202	Empire; Abo	2030
3001502622	Apache	EAU 021D	Q.	6	18.05	28E	6194	Empire; Abo	2031
3001500707	Apache	EAU 018B	O.	1	18.05	27E	6163	Empire; Abo	2080
3001500698	ARCO	EAU 191	P & A	1	18.05	27E	6365	Empire; Abo	2145
3001532309	Apache	AAO Fed.	0	1	18.0\$	27E	4125	Red Lake; Queen - Grayburg - SA	2200
3001531087	Marbob	LP State	P & A	6	18.0 S	28E	4466	Artesia; Queen - Grayburg - SA	2381
3001523548	Apache	EAU 211A	0,	6	18.05	28E	6311	Empire; Abo	2434
3001522096	Apache	EAU 183	O,	1	18.0S	27E	6210	Empire; Abo	2457
3001502613	Apache	EAU 021B	Ō,	6	18.05	28E	6119	Empire; Abo	2473
3001522560	Apache	EAU 192	Ò	1	18.0S	27E	6250	Empire; Abo	2483
3001526575	Navajo Refining	WDW 3	1,	1	18.05	27E	10119	Cisco & Canyon	2523
3001521395	Apache	EAU 211	O.	6	18.05	28E	6200	Empire; Abo	2615
3001532308	Apache	AAO Fed.	O	1	18.05	27E	4150	Red Lake; Queen - Grayburg - SA	2667



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- VII. 1. Average injection rate will be 5,000 bwpd. Maximum injection rate will be 7,500 bwpd.
 - 2. System will be closed.
 - Average injection pressure will be 1,000 psi.
 Maximum injection pressure will be 1,122 psi (= 0.2 psi/foot x 5,614' (highest perforation)).
 - 4. Injection source will be produced water only from Apache wells in the Empire Abo Unit, mainly from the Abo. Apache has >200 wells in the unit. An Abo water analysis is in Exhibit H. No compatibility problems have been reported from the other injection wells in the Unit.
 - 5. Abo is productive within one mile. The #202 well has produced at least 275,944 barrels of oil and 1,226,444 Mcf of gas.

VIII. The Abo (>400' thick in this well) reef extends east to west and is composed of fractured and vugular dolomitized limestone. Closest possible underground source of drinking water above the proposed injection interval are the near surface red beds. Water sands were found at 151' in an oil well (30-015-00739) that is 8,301' west. Surface casing was set at 1,000' and cement circulated to the surface in the #202 well.

According to State Engineer records (Exhibit I) and a January 22, 2014 field inspection, there are no water wells within 2,000 meters (6,561'). Closest water well (RA 08235) is 6,674' southeast. No depth has been reported for that well. No underground source of drinking water is below the proposed injection interval.

Formation tops are:

Rustler = 0' Yates = 390' Seven Rivers = 570' Queen = 1,150' Grayburg = 1,550' San Andres = 1,950' Glorieta = 3,375' Yeso = 3,525' Tubb = 4,600' Abo = 5,554'



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Total Depth: 6,296'

There will be more than a mile of vertical separation between the bottom of the only possible underground water source (red beds) and the top of the Abo.

Produced water has been injected or disposed into zones above (Queen, Grayburg, and San Andres) and below (Cisco and Canyon) the proposed injection interval in 3 wells within Section 1.

- IX. The well will be stimulated with acid to clean out scale or fill.
- X. GR DLL with RXO, caliper, GR neutron, and GR collar logs were run and are on file with the NMOCD.
- XI. According to the State Engineer's records and a January 22, 2014 field inspection, there are no water wells within a one-mile radius.
- XII. Apache is not aware of any geologic or engineering data that may indicate that the Abo is in hydrologic connection with any underground sources of water. Closest Quaternary fault is 56 miles southwest (Exhibit J). At least 127 injection and 13 saltwater disposal wells are active in the Abo.
- XIII. Notice (this application) has been sent (Exhibit K) to the surface owner (BLM), all oil and gas lessees or Abo operating right holders (see below), and all oil and gas lessors (only New Mexico State Land Office and BLM) within a half-mile:

BLM BP Chevron ConocoPhillips Company ExxonMobil



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Mewbourne NM State Land Office Oxy

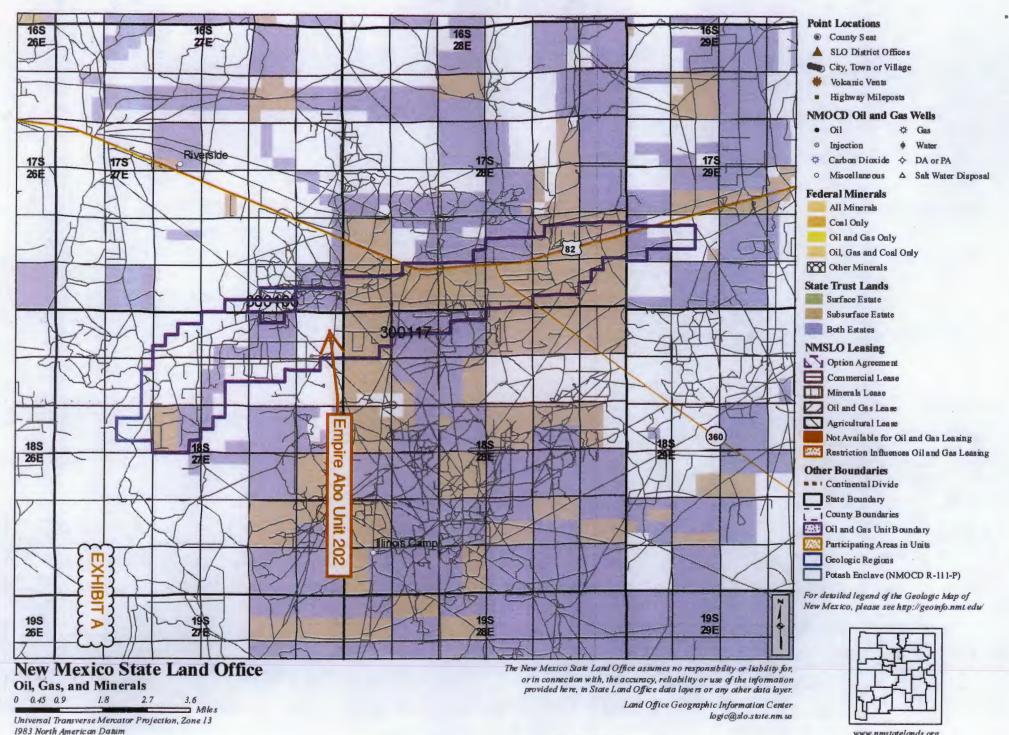
A legal ad (see Exhibit L) was published on November 15, 2013.



NE MEXICO OIL CONSERVATION COMMISSI. WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator		- 4			1_ease		WHI. 11						
		field Comp				pire Abo l	202						
'Init Letter	Secti	on	Township		Honge	7 F	County	٠					
H Actual Footage Loc	gtion (1 Well:	18 South		4	7 East	Ede	оу					
2490			lorth -	ne and	1299	14	et from the	East	.4.50				
Ground Level Elev.		Producing For			Por i				educate i Accordige;				
3656.1		Abo	Reef		Emp	ire Abo			40 ½ res				
1. Outline th	e acı	reage dedica	ted to the subj	ect we	ll by col	ored pencil	or hachure	marks on the	plat below.				
			dedicated to the	he well	, outline	each and id	entify the	wnership the	real (both as to working				
interest ar	na roj	yaity).											
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consoli-													
dated by communitization, unitization, force-pooling, etc?													
X Yes		No If ar	swer is "yes."	type o	f consolie	lation	nitizati	on	and developed to be the control of t				
II answer	is "r	o." list the	owners and trac	t desc	riptions v	chich have a	ectually has	en consolida	ed (Use reverse side of				
this form i								11 - 71170;11 1	The services side in				
No allowat	ole w	ill be assigne	ed to the well u	ntil all	interests	have been	consolidat	ed (by comm	unitization unitization,				
forced-poo	ling,	or otherwise)	or until a non-s	tandare	unit, el	minating su	ich interest	s, has been i	CENED the Commis-				
sion.								RE					
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www.nmstatelands.org

TOPO! map printed on 01/21/14 from "Untitled.tpo" 104.23333° W WGS84 104.21667° W Empire Abo Unit 202 32.77647° N, 104.22770° V COBBID unit boundary 3622 ©2005 Tele Atlas Rel 8/200 104.23333° W WGS84 104.21667° W 7.5°



0.0 0.1 0.2 0.3 0.4 0.5 0.8 0.7 0.8 miles 0.0 0.5 1.0 km



01/21/14

Apache Corporation - Empire Abo Unit

Wellbore Diagram – Current Status

Date: 12/19/11

API: 30-015-21783

S Hardin

202



Surface Location

2490' FNL & 1299' FEL, Unit H Sec 1, T18S, R27E, Eddy County, NM

Surface Casing 8-5/8" 24# K-55 @ 1000' w/ 350 sx to surface

	TUBING DE	TAIL	
Qty	Description	Length	Depth
199	2-3/8"		6157

DVT @ 4009'

SN @ 6157'

1/11/02: Perf @ 5614'-5618', 5625'-5628', 5660', 5663'-5670', 5685'-

5691', 5710'-5714', 5719'-5724', 5730'-5740', 5793' w/ 2 JSPF Acidized w/ 6500 gals 15% HCL w/ mycellular chemical

3/3/94: Perf Abo @ 5870'-6130', 168 holes Acidized w/ 5000 gals 15% NEFE

5/76: Perf Abo @ 6141'-61' w/ 2 JSPF, 42 holes

Acidized w/ 3000 gals 15% HCL-LSTNE & 3000 gals 15%

HCL/xylene

4/79: Sq'd perfs w/ 100 sx Cl C w/ .6% Halad-9, 50 sx Cl C w/ 2%

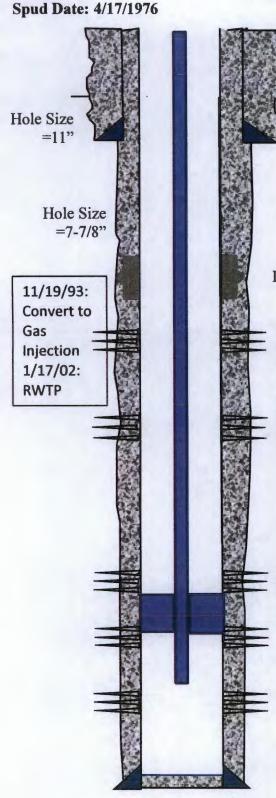
CaCl & 35 sx Cl C w/ .3% CFR-2

2/28/94: Perf Abo @ 6141'-61', 4 holes Acidized w/ 3500 gals 15% NEFE

11/17/92: Perf Abo @ 6176'-6206' w/ 2 JSPF

4/79: Perf @ 6250'-60' w/ 2 JSPF Acidized w/ 4650 gals 15% HCL-LSTNE-FE acid, 1000 gals 10# gelled CaCl water, 2000 gals gelled LC

Production Casing 5-1/2" 15.5#/14# J-55/K-55 @ 6296' w/ 550 sx (1st stage) & 1000 sx (2nd stage) to surface

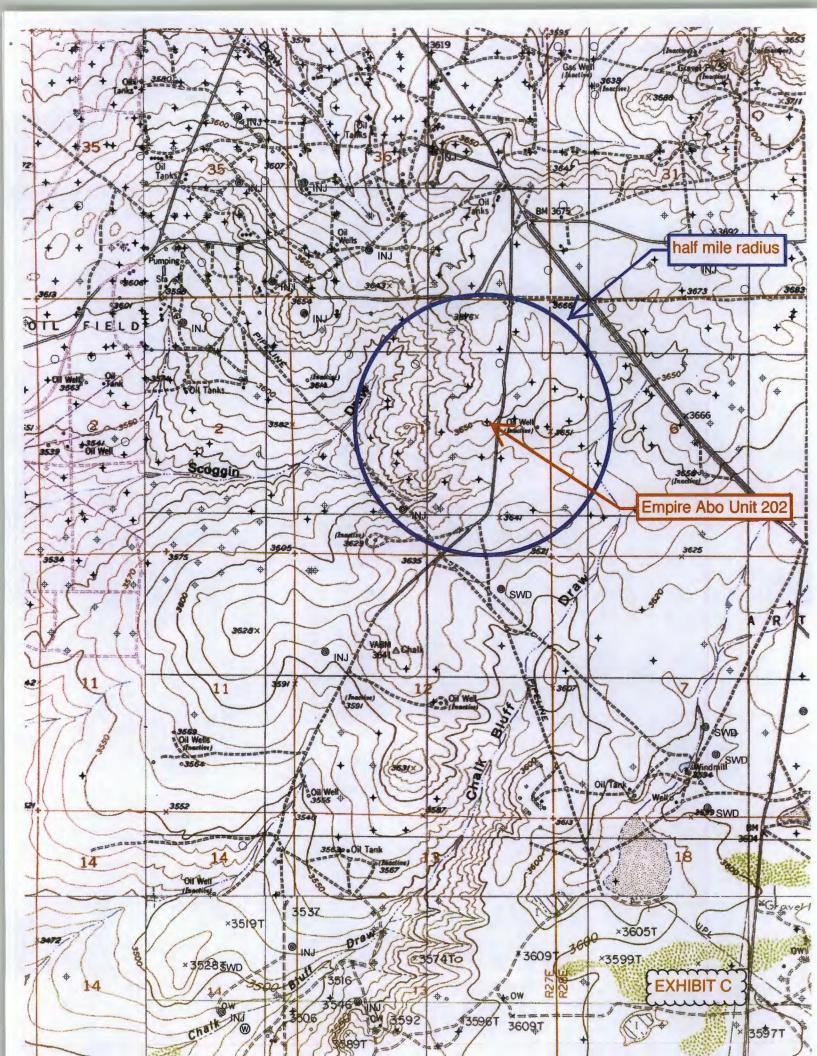


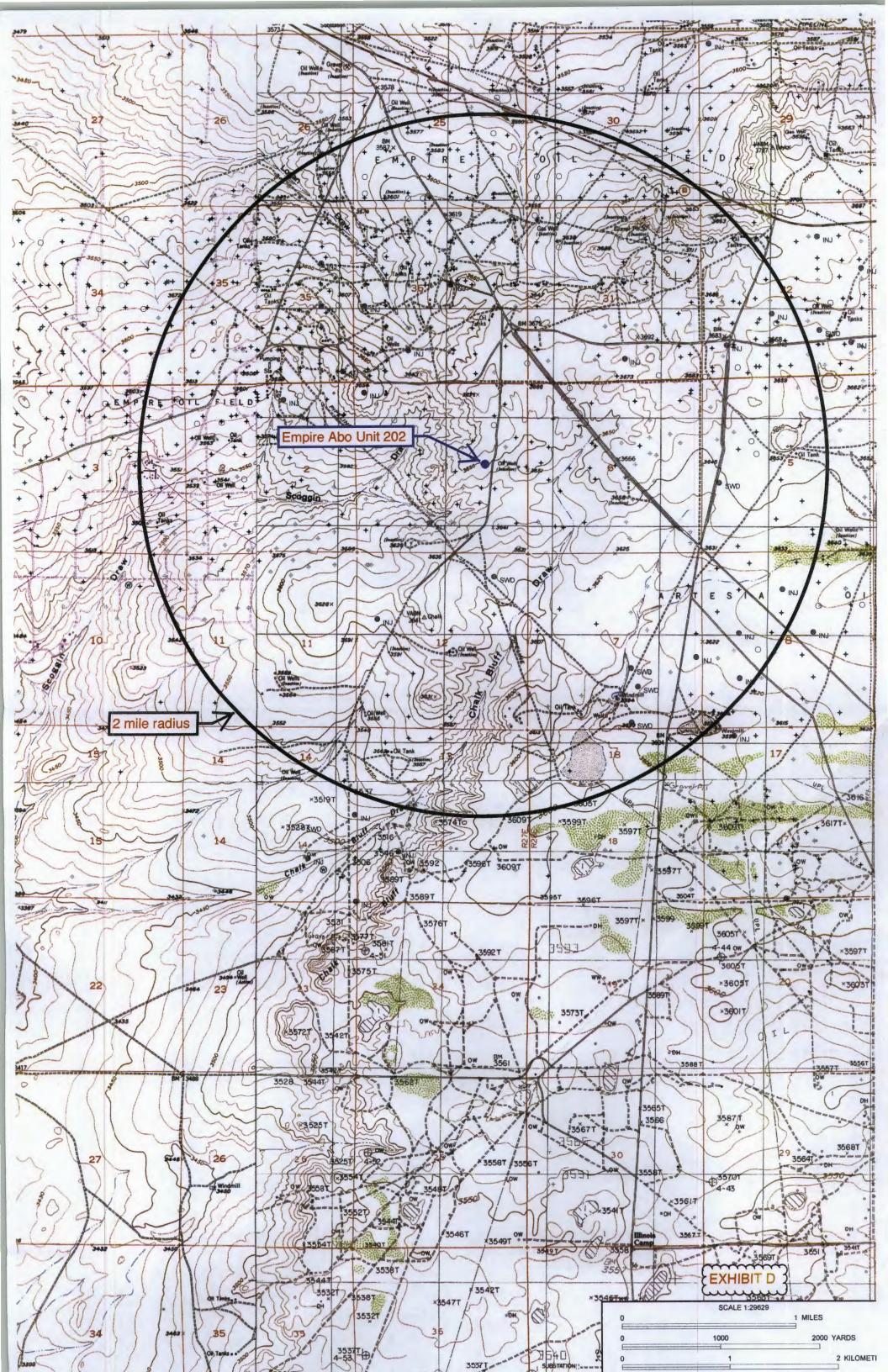
GL=3656'

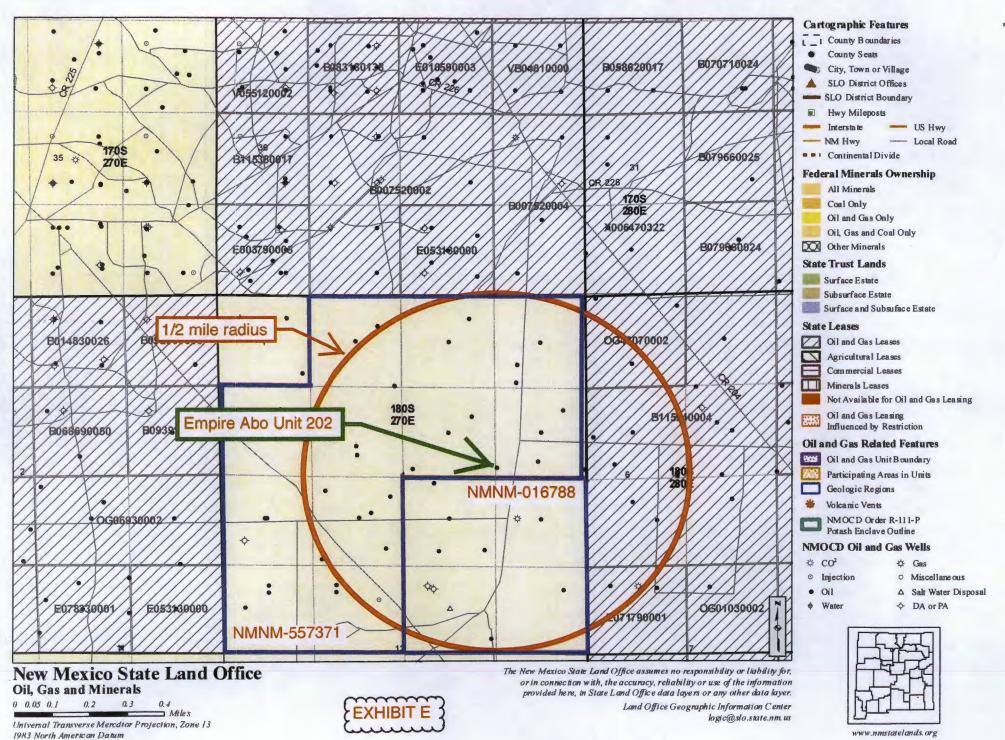
KB=3666'

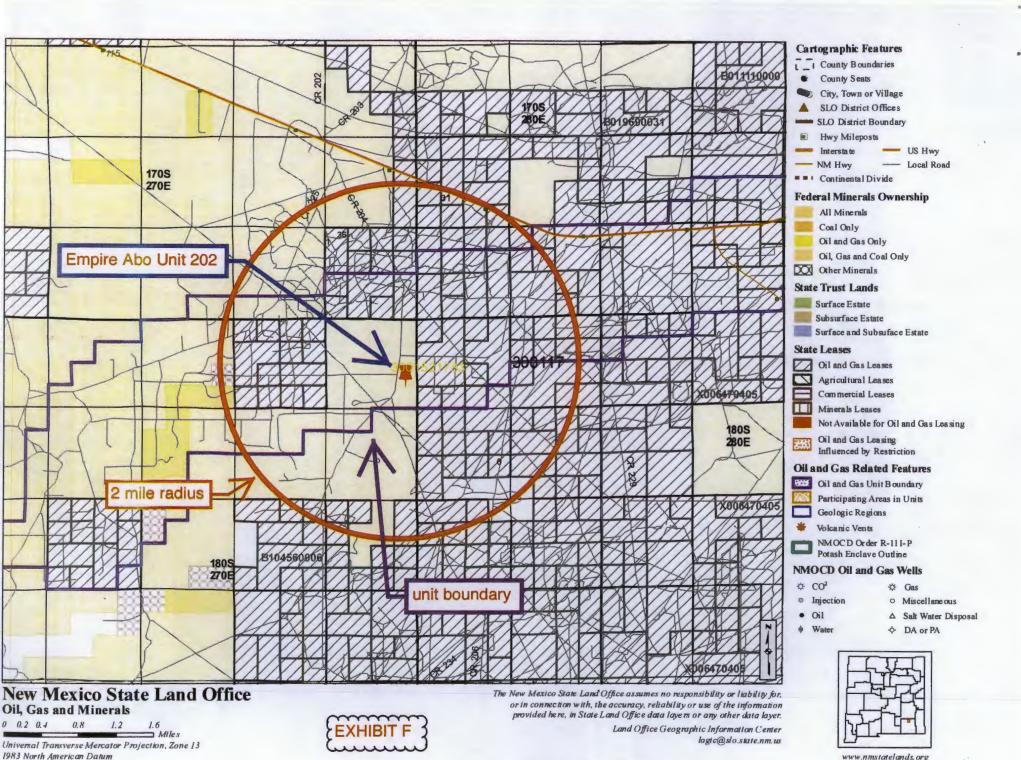
PBTD = 6270'TD = 6296'











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www.ninstatetanas.

Sorted by distance from EAU 202

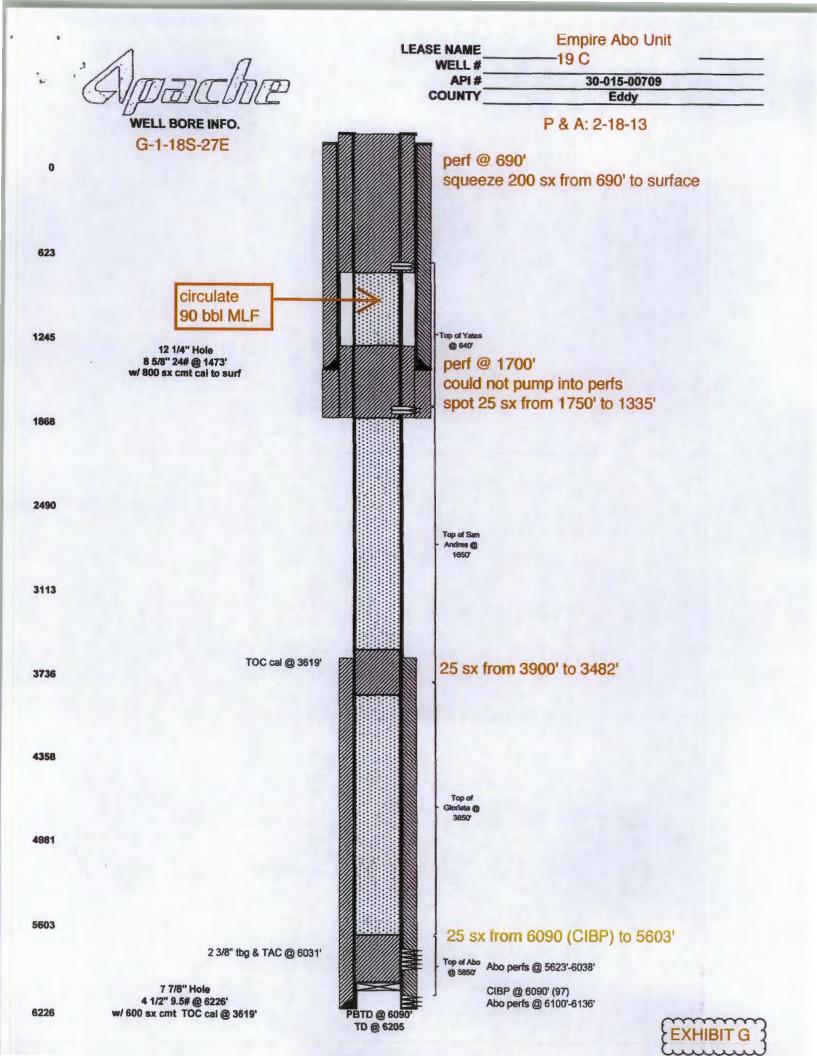
WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	тос	HOW DETERMINED
EAU 203	9/13/78	6225	Empire-Abo	Oil	11	8.625	1004	700 sx	no report	did not circulate
30-015-22656					7.875	5.5	6222	1325 sx	GL	circulated 165 sx
H-1-18s-27e										
Chalk Bluff Fed	11/24/92	10150	N. Illinois Camp Morrow	Gas	17.5	13.375	700	515 sx	GL	circulated 50 sx to pit
Com 003	11/24/92	10150	N. Thirlois Camp Morrow	Gas	17.5	13.3/5	700	313 2X		
30-015-27163					12.25	9.625	2600	840 sx	GL	circulated 50 sx to pit
I-1-18s-27e					8.75	7	8968	1200 sx	no report	no report
EAU 020C	9/15/59	6218	Empire-Abo	P&A	11	8.625	1499	no report	GL	circulated
30-015-00711					7.875	4.5	6218	850 sx	4300	well bore diagram
H-1-18s-27e										
EAU 019C	7/6/59	6205	Empire-Abo	P&A	12.25	8.625	1475	800 sx	GL	circulated
30-015-00709					7.875	4.5	6205	600 sx	3619	calculated
G-1-18s-27e										
										·
EAU 193	9/29/78	6225	Empire-Abo	Oil	11	8.625	1006	700 sx	GL	circulated 175 sx to pit
30-015-22657			-		7.875	5.5	6225	1300 sx	GL	circulated 130 sx to pit
J-1-18s-27e										
EAU 020K	8/31/59	6185	Empire-Abo	P&A	11	8.625	1522	850 sx	GL	circulated
30-015-00697					7.875	4.5	6185	200 sx	5500	estimated, per diagram
I-1-18s-27e										
EAU 019Q	7/14/59	6180	Empire-Abo	P&A	11	8.625	1516	850 sx	GL	circulated
30-015-00696					7.875	4.5	6180	170 sx	5170	well bore diagram
J-1-18s-27e										
EAU 191A	8/27/76	6350	Empire-Abo	Oil	11	8.625	1000	400 sx	GL	circ. 5 yds Redi-Mix to surface
30-015-21873					7.875	5.5	6350	1500 sx	GL	circulated 150 sx to pit
J-1-18s-27e										

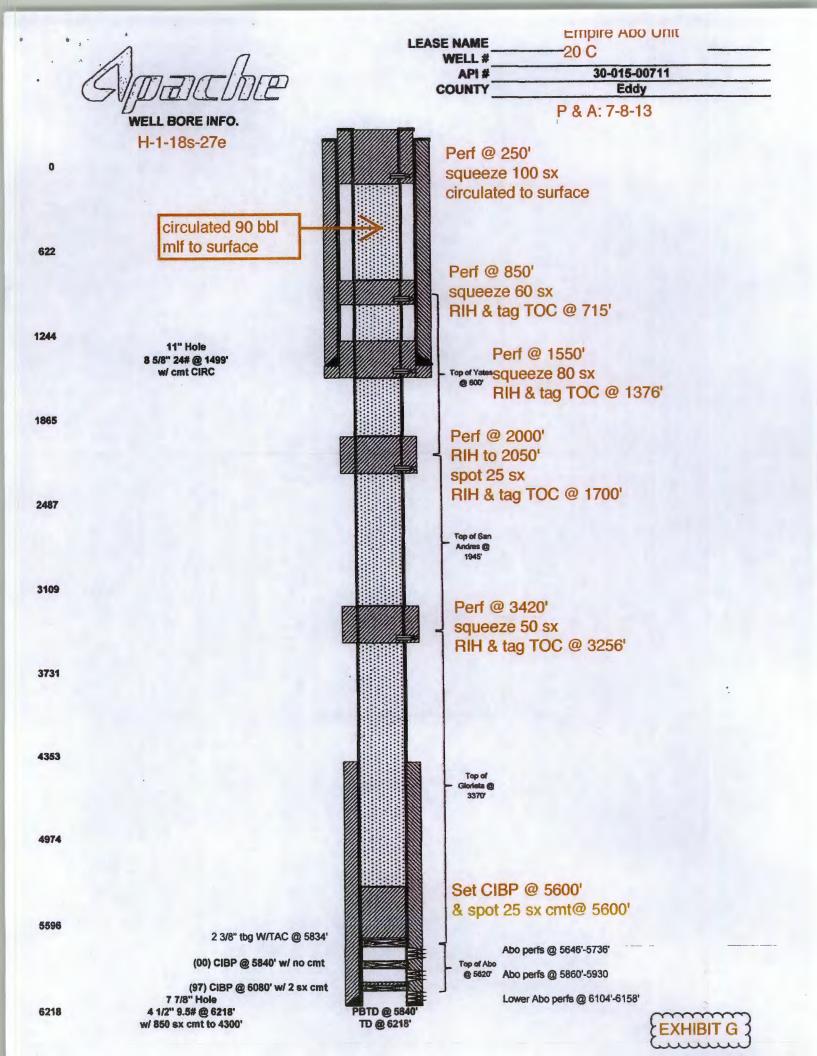
WELL	SPUD	TD	POOL	WELL	HOLE	CASING	SET @	CEMENT	тос	HOW DETERMINED
				TYPE	O.D.	O.D.				circ. 10 yds Red-Mix to
EAU J 191	8/5/75	6259	Empire-Abo	P&A	11	8.625	1001	550 sx	GL	surface
30-015-21552					7.875	5.5	6259	1400 sx	GL	circulated 205 sx to pit
G-1-18s-27e			And the Control of th							
EAU 412	no spud yet	planned 6300	Empire-Abo	Oil	12.25	8.625	370	310 sx	GL	planned cement to surf.
30-015-39898					7.875	5.5	6300	1035 sx	GL	planned cement to surf.
A-1-18s-27e										
EAU 201	6/28/75	6225	Empire-Abo	Oil	11	8.625	1012	525 sx	GL	cemented 50 yds Redi- Mix
30-015-21553					7.875	5.5	6225	1150 sx	GL	circulated 120 sx
H-1-18s-27e										
EAU 194	10/18/78	6325	Empire-Abo	Oil	11	8.625	998	750 sx	GL	circulated 10 sx to pit
30-015-22658					7.875	5.5	6325	1300 sx	GL	circulated 129 sx to pit
J-1-18s-27e				_						
	2/10/00	6242	Empire Alex	0:1	12.25	0.625	1000	F00	- CI	
EAU 213	3/10/80	6242	Empire-Abo	Oil	12.25	9.625	1000	500 sx	GL	cemented 2 yds Redi-Mix
30-015-23116					8.75	7	6115	1350 sx	GL	circulated 315 sx
E-6-18s-28e										
EAU 184	6/20/78	6200	Empire-Abo	P & A	11	8.625	1010	600 sx	GL	circulated 125 sx to pit
30-015-22559					7.875	5.5	6200	1055 sx	GL	circulated 40 sx to pit
K-1-18s-27e										
				-						
EAU 212	12/4/78	6267	Empire-Abo	Oil	11	8.625	553	600 sx	GL	circulated 5 yds Redi-Mix
30-015-22637				1	7.875	5.5	6250	1650 sx	GL	circulated 65 sx
E-6-18s-28e					7,107,0	4.5				
EAU 413	no spud yet	planned 6300	Empire-Abo	Oil	12.25	8.625	350	310 sx	GL	planned cement to surf.
30-015-39899					7.875	5.5	6300	1035 sx	GL	planned cement to surf.
C-1-18s-27e										
EAU 020D	10/7/59	6118	Empire-Abo	Oil	11	8.625	1481	no report	GL	circulated
30-015-01215					7.875	4.5	6133	850 sx	no report	no report
A-1-18s-27e									l	

Sorted by distance from EAU 202

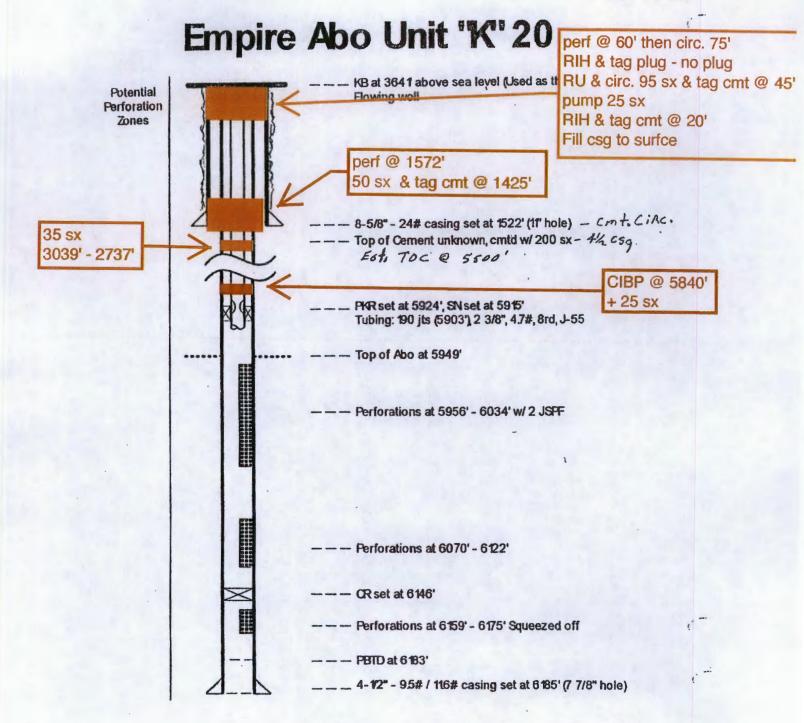
WELL	SPUD	TD	POOL	WELL	HOLE O.D.	CASING O.D.	SET @	CEMENT	тос	HOW DETERMINED
EAU 182	5/6/76	6369	Empire-Abo	Oil	11	8.625	1003	400 sx	GL	circulated 60 sx to pit
30-015-21792					7.875	5.5	6369	1400 sx	GL	circulated 125 sx to pit
K-1-18s-27e										
EAU L 019	3/16/71	6300	Empire-Abo	P&A	11	8.625	1531	900 sx	GL	circulated
30-015-20394					7.875	4.5	6300	450 sx	3810	CBL
O-1-18s-27e					squeeze	job	3780	1000 sx	GL	circulated
EAU 019B	6/3/59	6078	Empire-Abo	P & A	12.25	8.625	1485	750 sx	GL	calculated
30-015-00708					7.875	4.5	6078	700 sx	3036	calculated
B-1-18s-27e										
EAU 018A	4/24/59	6087	Empire-Abo	Oil	12.25	8.625	1445	750 sx	GL	report
30-015-00706					7.875	4.5	6014	850 sx	no report	no report
F-1-18s-27e										
EAU 020B	11/16/61	6250	Empire-Abo	Oil	11	8.625	1494	820 sx	no report	no report
30-015-00699					7.875	4.5	6250	850 sx	2500	temperature survey
P-1-18s-27e										
					<u> </u>					
EAU 021C	10/8/59	6202	Empire-Abo	Oil	no report	8.625	1493	700 sx	GL	circulated
30-015-02619					no report	5.5	6241	650 sx	no report	no report
E-6-18s-28e				ļ		- 70				
EAU 021D	12/27/59	6194	Empire-Abo	Oil	12.25	8.625	1003	550 sx	GL	circulated
30-015-02622	12/27/59	0194	Empire-Abo	011	7.875	5.5	6194	850 sx	125	no report
L-6-18s-28e					7.873	3.5	0194	030 3X	123	Потероге
L-0-103-20E					1					
EAU 018B	4/23/59	6163	Empire-Abo	Oil	12.25	8.625	1507	600 sx	no report	no report
30-015-00707	.,2,				7.875	4.5	6163	600 sx	no report	no report
K-1-18s-27e				1						
EAU L 191	10/7/59	5400	San Andres-Yeso	P&A	no report	8.625	1522	850 sx	GL	circulated
30-015-00698					7.875	5.5	2042	200 sx	GL	reversed 75 sx
O-1-18s-27e		6365	Empire-Abo	P&A	7.875	not set	not set	N/A_	N/A	N/A

WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	тос	HOW DETERMINED
EAU 211A	2/11/81	6311	Empire-Abo	Oil	12.25	9.625	980	425 sx	GL	circulated 51 sx
30-015-23548	2/11/01	6211	Empire-Abo	Oil	8.75	7	6250	1325 sx	GL GL	circulated 260 sx
L-6-18s-28e					0.73		0230	1323 38	GL.	Circulated 200 sx
L-0-103-20E										
EAU 183	6/23/77	6210	Empire-Abo	Oil	11	8.625	1000	450 sx	GL	circulated 24 sx to pit
30-015-22096	-,,				7.875	5.5	6210	1660 sx	GL	circulated 269 sx to pit
K-1-18s-27e										
EAU 021B	12/8/59	6119	Empire-Abo	Oil	11	8.625	971	350 sx	GL	circulated
30-015-02613					7.875	5.5	6119	850 sx	no report	no report
D-6-18s-28e										
EAU 192	5/30/78	6250	Empire-Abo	Oil	11	8.625	1005	700 sx	GL	circulated 100 sx
30-015-22560					7.875	5.5	6250	1265 sx	GL	circulated 150 sx to pit
J-1-18s-27e										
WDW 003	12/22/00	10110	N. Tiliania Coma Managan	\A/T\A/	17.5	12 275	400	1025 sx	GL	circulated 20 sx
WDW 003	12/22/90	10119	N. Illinois Camp Morrow	WIW	12.25	13.375 9.625	2604	1025 sx 1025 sx	GL	circulated 40 sx
30-015-26575					8.75	7	9450	1350 sx	GL	circulated
N-1-18s-27e					0.75	 	9430	1330 SX	GL .	Circulated
EAU 211	12/12/74	6200	Empire-Abo	Oil	12.25	8.625	990	700 sx	GL	circulated
30-015-21395	12/12//	0200	Empire 7 to 0		7.875	5.5	6200	1515 sx	GL	circulated 150 sx
E-6-18s-28e									·	
				 	<u> </u>					
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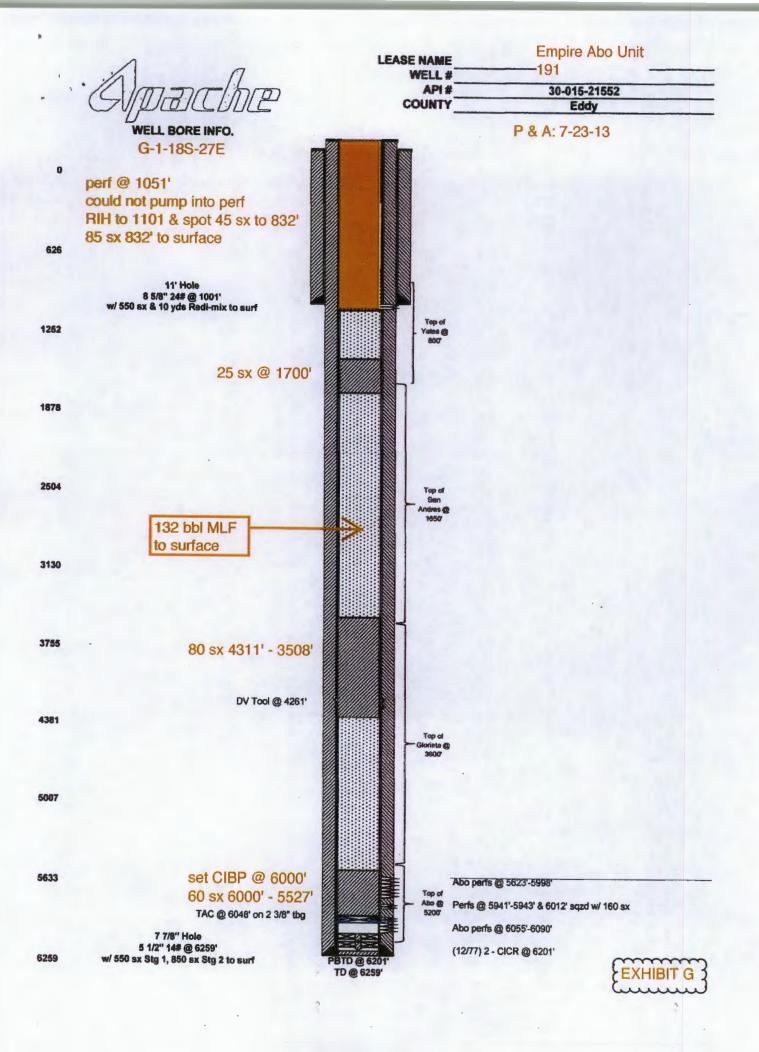


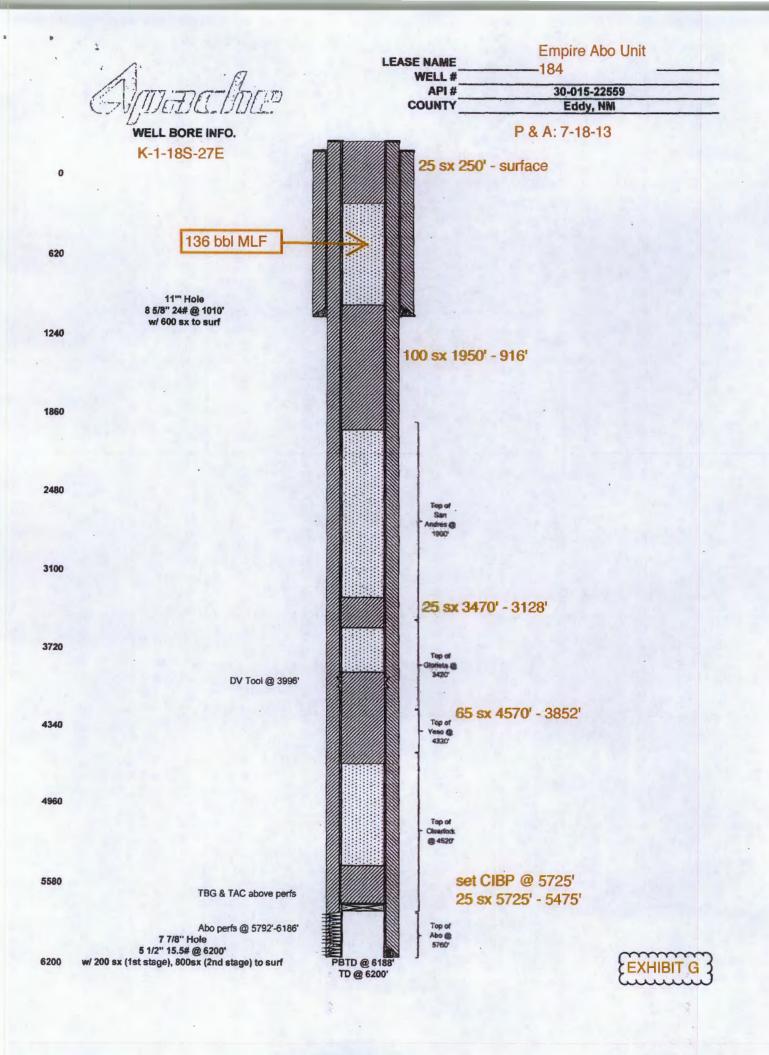
Empire Abo Unit 20 K 30-015-00697 I-1-18s-27e P & A: 1-5-03





4 9		LEASE NAME	——19 Q	
	Apparathe?	WELL#	30-015-00696	_
1	CAMPEDCIME	COUNTY	Eddy	
	J-1-18S-27E		P & A: 7-12-13	
	J-1-105-2/E			
0		50 sx 703'	- GL	
		BBBBB		
618				
236				
	11" Hole			
	8 5/8" 24# @ 1516' w/ 850 sx to surf	40 sx 2002'	- 1306'	
854				
472				
090				
		25 sx 353	7' - 3143'	
		25 57 050	, 5146	
708				
		Top of - Giorieta @		
		3467		
326				
320		Top of Yeso @		
		4370		
944				
	TOC @ 5170'	Top of - Clearfork		
			SIBP @ 5850'	
562		100 s	sx 5850' - 4430'	
		+ 25	sx 4430' - 4160'	
	· · · · · · · · · · · · · · · · · · ·	Top of Abo pe	rfs @ 5926'-6060'	
	7 7/8" Hole 4 1/2" 11.9/9.5# @ 6180'	Abo @ CIBP @	© 6130' (5/97) rfs @ 6144'-6170'	~~
180	w/ 170 sx Drilled TOC @ 5170'	PBTD @ 6130' TD @ 6180'	EXHIBIT	G





953' FSL & 2197' FEL Eddy Co., NM. 30-015-20394 Pre-plug Post-plug 30-015-20388 Plug #5 100'-surf. P & A: 1-2-92 10 sx Plug #4 900'-640' 20 sx Plug #3 2200'-1300' 8-5/8" 24 ppf @ 1531' Cmt. w/ 900 sx 70 sx Plug #2 3900'-3450' Squeeze holes @ 3780' 35 sx 2-3/8" 4.7 ppf J-55 EUE Tbg. Gulberson KVL pkr. w/SN CR @ 6080' X 100 sx (35') Abo Perfs. 6206'-6216' on top 11 holes. 4-1/2" 9.5 ppf K-55 @ 6300' Cmt. w/ 450 sx TD@ 6300' TD@ 6300' PBTD @ 6273' PBTD @ 6273'

Empire Abo L-19

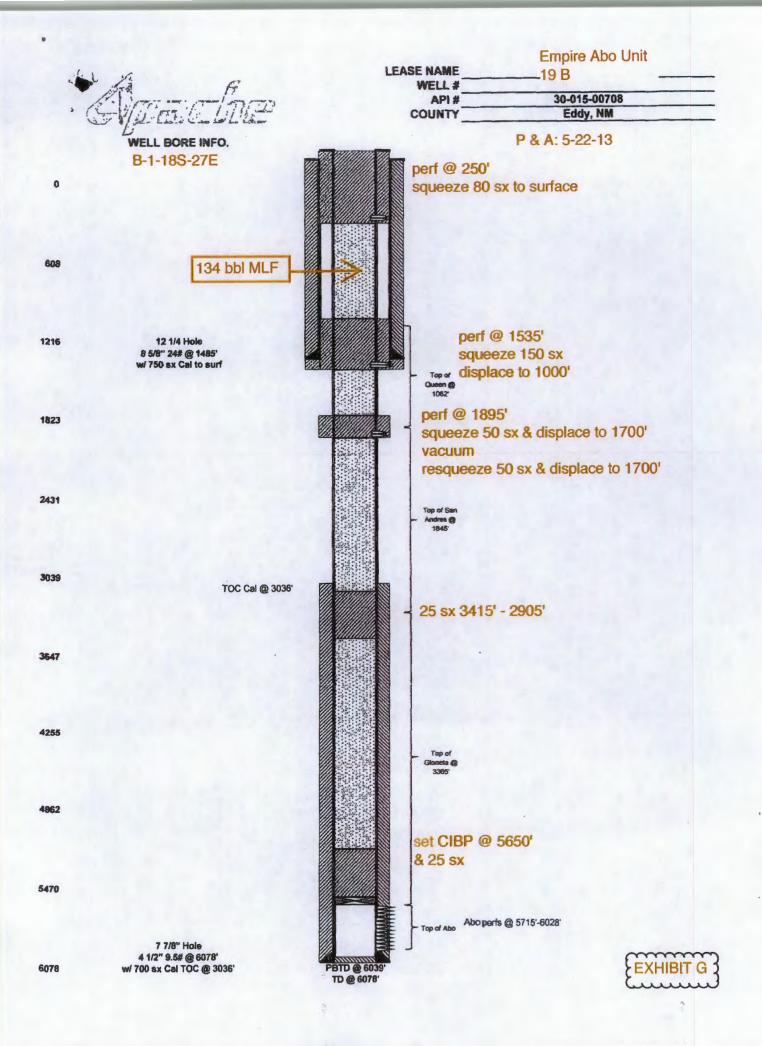
Sec. 1, T18S, R27E

aka, Empire Abo Unit 19,

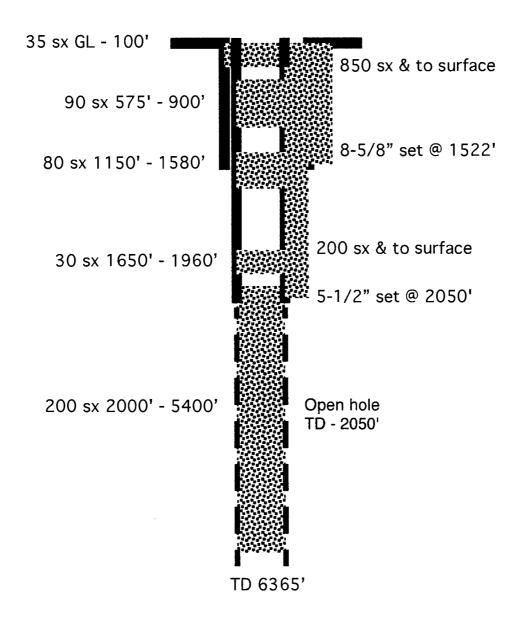
aka Empire Abo Unit 5

RDR 9/19/91





Empire Abo Unit 191 API 30-015-00698 660 FSL & 1980 FEL 1-18s-27e Spud 10-7-59 and Plug 12-9-89



(not to scale)

EXHIBIT G



nation reasons de les con a se an années au san de la la la décide de la manuer de mont au annees au annees au annees	Goneral In	formation About: Sample 5343				
	General III	GREEN B				
API	3001503183	Sample Number				
Unit/Section/ Township/Range	N / 29 / 17S / 29E	Field	GRAYBURG-JACKSON			
County	Eddy	Formation	ABO			
State	NM	Depth				
Lat/Long	32.79889 , -104.09750	Sample Source	UNKNOWN			
TDS (mg/L)	29400	Water Type				
Sample Date(MM/DD/YYYY)		Analysis Date(MM/DD/YYYY)				
Remarks/Description						
	Cation Information (mg/L)	Anion Information (mg/L)				
Potassium (K)		Sulfate (SO)	2800			
Sodium (Na)		Chloride (CI)	13700			
Calcium (Ca)		Carbonate (CO ₃)				
Magnesium (Mg)		Bicarbonate (HCO₃)	2520			
Barium (Ba)		Hydroxide (OH)				
Manganese (Mn)		Hydrogen Sulfide (H₂S)				
Strontium (Sr)		Carbon Dioxide (CO ₂)				
Iron (Fe)		Oxygen (O)				





New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum)

(R=POD has been replaced

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed)

(quarters are smallest to largest) (NAD83 UTM in meters)

	Sub					999					
WR File Nbr	basin Use Di	version Owner	Count	y POD Number	Code Grant	Source 6416 4	Sec	Tws R	ng X	Υ	Distance
RA 08235	STK	1.43 BOGLE FARMS	ED	RA 06235			07	18S 28	E 573537	3625134*	2035
RA 02996	DOM	3 PATON BROTHERS	ED	RA 02996		2 3 1	02	18S 27	E 569808	3627025*	2531
RA 08236	STK	1 BOGLE FARMS	ED	RA 08236		3 3	08	18S 28	E 574557	3624563*	3138
RA 08237	STK	1.47 BOGLE FARMS	ED	RA 08237		3 3	80	18S 28	E 574557	3624563*	3138

Record Count: 4

UTMNAD83 Radius Search (in meters):

East... 572327

Northing (Y): 3626771

Radius: 3220

3220 meters x 3.28 feet/meter = 10.561' = 2.00 miles

Sorted by: Distance



*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

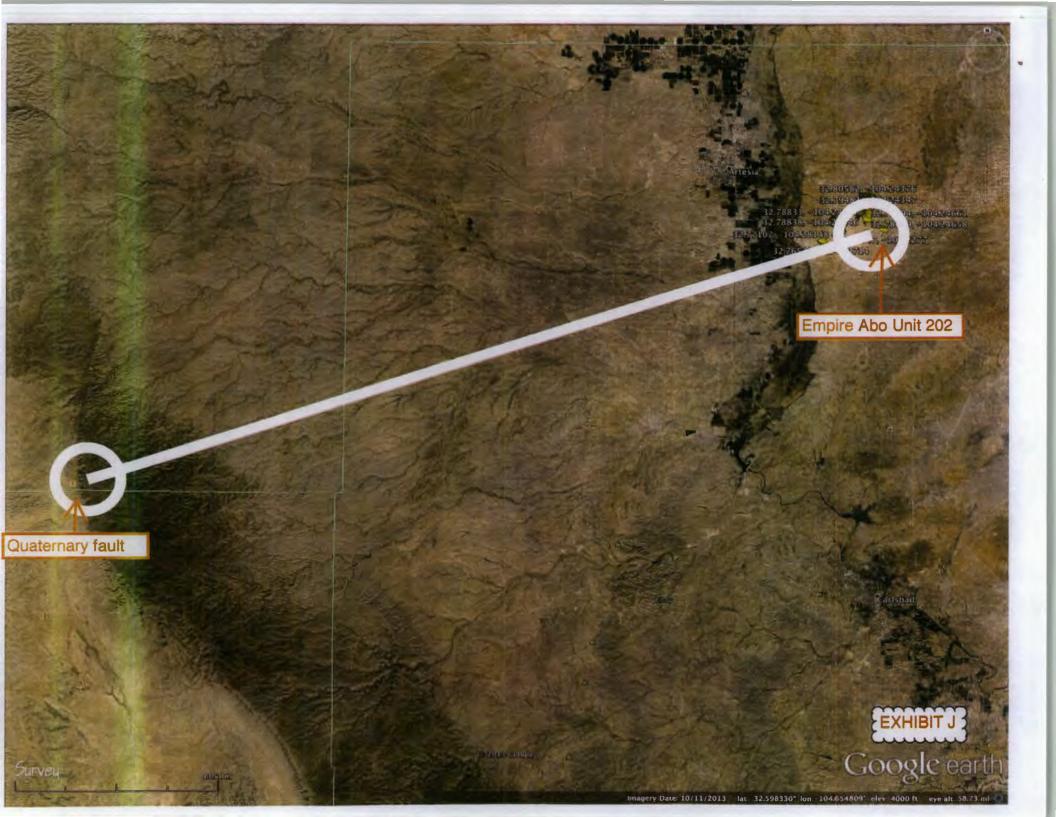
UTMNAD83 Radius Search (in meters):

Easting (X): 572327

Northing (Y): 3626771

Radius: 3220







37 Verano Loop, Santa Fe, New Mexico 87506

February 13, 2014

BL M 620 E. Greene St. Carlsbad NM 88220

Apache Corporation is applying (application attached) to convert its Empire Abo Unit 202 oil well to a water injection well. As required by NM Oil Conservation Division Rules, I am notifying you of the following proposal. This letter is a notice only. No action is needed unless you have guestions or objections.

Well Name: Empire Abo Unit 202 (BLM lease) TD = 6.296'

Proposed Injection Zone: Abo (from 5,614' - 6,260')

Location: 2490' FNL & 1299' FEL Sec. 1, T. 18 S., R. 27 E., Eddy County, NM

Approximate Location: ≈11 air miles southeast of Artesia, NM Applicant Name: Apache Corporation (432) 818-1926

Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

Submittal Information: Application for a water injection well will be filed with the NM Oil Conservation Division (NMOCD), If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The NMOCD address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely.

Brian Wood

March Control of the	Service™ O MAIL™ RE(Inly; No Insurance C		vided)
For delivery information	ation visit our website	at www.usps.c	OM 30 STORES
Postage Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required)	\$	Pasim Here FEB	
Sent To Street, Apt. No.: or PO Box No.	\$ BLM	87	552
City. State, ZIP+4	************************	*********	



37 Verano Loon, Santa Fe, New Mexico 87508

February 13, 2014

BP America Production Co. 501 Westlake Park Blvd. Houston, TX 77079

Apache Corporation is applying (application attached) to convert its Empire Abo Unit 202 oil well to a water injection well. As required by NM Oil Conservation Division Rules, I am notifying you of the following proposal. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Empire Abo Unit 202 (BLM lease) TD = 6.296'

Proposed Injection Zone: Abo (from 5.614' - 6.260')

Location: 2490' FNL & 1299' FEL Sec. 1, T. 18 S., R. 27 E., Eddy County, NM

Approximate Location: ≈11 air miles southeast of Artesia, NM Applicant Name: Apache Corporation (432) 818-1926

Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

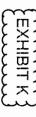
Submittal Information: Application for a gas injection well will be filed with the NM Oil Conservation Division (NMOCD). If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The NMOCD address is 1220 South St. Francis Dr. Santa Fe. NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely

Brian Wood







February 13, 2014

Chevron USA Inc. P. O. Box 2100 Houston TX 77252

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Return Receipt Fee

(Endorsement Required)

Restricted Delivery Fee

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(Endorsement Required) Total Postage & Fees RVION Sent To Street, Apt. No.: or PO Box No. City, State, ZIP+4 See Reverse for Instructions PS Form 3800, August 2006

Sincerely. Brian Wood



February 13, 2014

ConocoPhillips Company P. O. Box 7500 Bartlesville, OK 74005-7500

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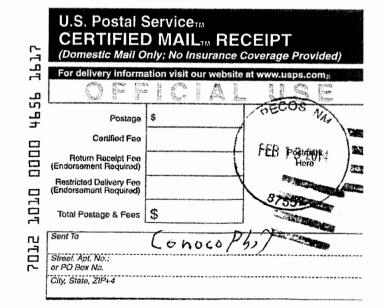
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Brian Wood





February 13, 2014

ExxonMobil Corporation P. O. Box 4358 Houston, TX 77210-4358

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Sincerely.

Brian Wood







February 13, 2014

Mewbourne Oil Co. P. O. Box 5270 Hobbs NM 88241

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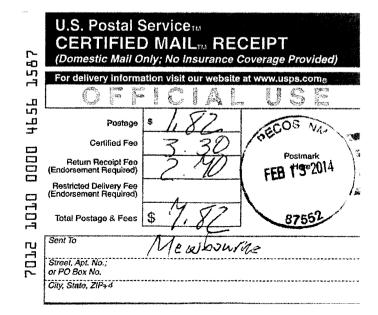
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Sincerely,

Brian Wood





37 Verano Loon, Santa Fe, New Mexico 87508

February 13, 2014

Nick Jaramillo New Mexico State Land Office P. O. Box 1148 Santa Fe, NM 87504-1148

Dear Nick.

or PO Box No.

City, State, ZIF+4

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Restricted Delivery Fee (Endorsement Required)			7	\	/	100		
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Sent To	X	SM	152	Ø				



Brian Wood



February 13, 2014

Altura Energy c/o Occidental Petroleum Corporation P. O. Box 4294 Houston, TX 77210

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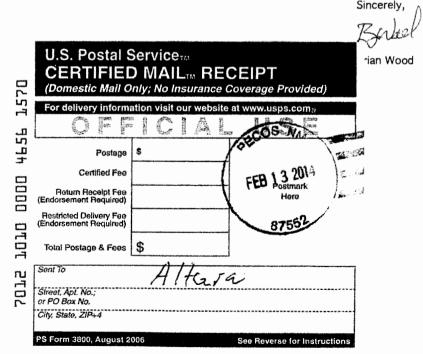
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EXHIBIT

Affidavit of Publication NO.

22788

STATE OF NEW MEXICO						
County of Eddy:						
Danny Scott Vancy Scot						
being duly sworn, says that he is the Publisher						
of the Artesia Daily Press, a daily newspaper of general						
circulation, published in English at Artesia, said county						
and state, and that the hereto attached						
Legal Notice						
was published in a regular and entire issue of the said						
Artesia Daily Press, a daily newspaper duly qualified						
for that purpose within the meaning of Chapter 167 of						
the 1937 Session Laws of the state of New Mexico for						
1 Consecutive weeks/days on the same						
day as follows:						
First Publication November 15, 2013						
Second Publication						
Third Publication						
Fourth Publication						
Fifth Publication						
Subscribed and sworn to before me this						
18th day of November 2013						
OFFICIAL SEAL Latishe Romine NOTARY PUBLIC-STATE OF NEW MEXICO My commission expires: 5 112 20 5						
Ω						

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:





C-108 Review	Checklist: Red	ceived 2/13/20/4 Add. Requ	est:	Reply Date:	Suspended: [Ver 13]
PERMIT TYPE: WF	X/MX/SWD Nu	mber: Perr	nit Date:	Legacy Perm	its/Orders: <u>R-454</u>
Well No. 202 Well Name(s	Empir	ze Abo	unit		
PI:30-0 15 - 21783	Spud Date	e: <u>4/17/1576</u>	New or Old:	(UIC Class II	Primacy 03/07/1982)
ootages 2 Y fo Fng	1254667 ot	_ or Unit Sec	Tsp / \$	7 <u>5 </u>	F County Edd
eneral Location:		Pool:			Pool No.:
_M 100K Map:	Operator: Apa	use con	OGRID:	%73 _Conta	ct: BriAn wood
OMPLIANCE RULE 5.9: Total Wells	s: Inactiv	e: 3 Fincl Assur:	Compl.	Order? IS 5	5.9 OK? Date: <u>9-30 -</u> /
ELL FILE REVIEWED © Current	Status: Pnd	duce			
ELL DIAGRAMS: NEW: Proposed	or RE-ENTER:	Before Conv. O After (Conv. 🔑 Lo	ogs in Imaging:	
anned Rehab Work to Well:			_		
Well Construction Details:	Sizes (in)	Setting		Cement	Cement Top and
	Borehole / Pipe	Depths (ft)	Since Tool	Sx or Cf	Determination Method
Plannedor ExistingSurface Plannedor ExistingInterm/Prod	11 4.2	1000	Stage Tool	350	S/ Visacl
Planned_or ExistingInterm/Prod					
Planned_or Existing Prod/Liner	-7811/5±4	6296		1550	S/VISEL1
Planned_or Existing Liner	/ 10 /3 2	6276		7330	3/01342/
Planned_or Existing _ OH / EBB	56146		ini Length	Completion	│ √Operation Details:
Injection Stratigraphic Units:	Depths (ft)	Injection or Confining	Tops		6 PBTD
Adjacent Unit: Litho. Struc. Por.		Units	T	_	NEW PBTD
Confining Unit: Litho. Struc. Por.	- 1 Miles (Aug 194 a) Miles (- 1 Aug 194 a)	· · · · · · · · · · · · · · · · · · ·		-) or NEW Perfs 🕒
	5164				in. Inter Coated?
Proposed Inj Interval TOP: Proposed Inj Interval BOTTOM: Confining Unit: Litho Struc Por	6260				epth <u>SSFY</u> ft
Confining Unit: Litho. Struc. Por.				Min. Packer Depth	<u> </u>
Adjacent Unit: Litho. Struc. Por.					face Press. 1122 psi
	* * * * * * * * * * * * * * * * * * *				112 2 (0.2 psi per ft)
POTASH: R-111-P O Noticed?	BLM Sec Ord (→ WIPP → Noticed? _	SALT/	SALADO T:B	: CLIFF HOUSE
RESH WATER: Aquifer		·			
NMOSE Basin: ROSW 611	CAPITAN REEF:	thru adj NA	No. Wells w	ithin 1-Mile Radius	? FW Analysis (
Disposal Fluid: Formation Source(s	Abu	Analysi	s?	On Lease () Operat	or Only () or Commercial
Pisposal Fluid: Formation Source(s Pisposal Int: Inject Rate (Avg/Max E	5000 BWPD): 700	Protectable Wate	ers?Sc	ource: S	ystem: Closed Gor Open
IC Potential: Producing Interval?	Formerly Produ	cing?Method: Lo	gs/DST/P&A	Other	2-Mile Radius Pool Map
AOR Wells: 1/2-M Radius Map?_	Y Well List?_	Y Total No. Wells I	Penetrating In	terval: <u>37</u> H	orizontals?
Penetrating Wells: No. Active Well	_4	•			
Penetrating Wells: No. P&A Wells_	Num Repairs?	on which well(s)? _			Diagrams?
Penetrating Wells: No. P&A Wells_OTICE: Newspaper Date	5-24 Mineral (Owner BLM	Surface O	wner_ \$Lm	N. Date 2-13-1
ULE 26.7(A): Identified Tracts? _					

Permit Conditions: Issues: