

DATE IN 10/15/2013	SUSPENSE	ENGINEER DB	LOGGED IN 10/16/13	TYPE PC	PPAG 1328751727
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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



100D

P 1:54

**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

**[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]**  
**[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]**  
**[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]**  
**[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]**  
**[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]**  
**[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]**

**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☒ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify \_\_\_\_\_

**[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply**

[A] ☒ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or, 30-025-37357

[F] ☐ Waivers are Attached

**[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

**[4] CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

REESA HOLLAND FISHER  
Print or Type Name

Reesa Fisher  
Signature

SR STAFF REG TECH  
Title

10/9/2013  
Date

LUSK 34 WELLS

Reesa.Holland@apachecorp.com  
e-mail Address

1269

RECEIVED OGD  
OCT 15 2 14 PM

Apache Corp  
Six Wells  
30-025-40797  
Lusk 34 Fed #1H  
30-025-40693  
Lusk 34 Fed #2H  
30-025-36439  
SE Lusk 34 #1  
30-025-37357  
SE Lusk 34 #2  
30-025-37358  
SE Lusk 34 #3  
30-025-37680  
SE Lusk 34 #4

District I  
1625 N. French Drive, Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St Francis Dr, Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107-B  
Revised August 1, 2011

### OIL CONSERVATION DIVISION

1220 S. St Francis Drive  
Santa Fe, New Mexico 87505

Submit the original  
application to the Santa Fe  
office with one copy to the  
appropriate District Office.

#### APPLICATION FOR SURFACE COMMINGLING (DIVERSE OWNERSHIP)

OPERATOR NAME: Apache Corporation

OPERATOR ADDRESS: 303 Veterans Airpark Lane Midland TX 79705

APPLICATION TYPE:

LUSK 34 FEDERAL LEASES

☒ Pool Commingling ☐ Lease Commingling ☐ Pool and Lease Commingling ☐ Off-Lease Storage and Measurement (Only if not Surface Commingled)

LEASE TYPE: ☐ Fee ☐ State ☒ Federal

Is this an Amendment to existing Order? ☐ Yes ☒ No If "Yes", please include the appropriate Order No. \_\_\_\_\_

Have the Bureau of Land Management (BLM) and State Land office (SLO) been notified in writing of the proposed commingling

☒ Yes ☐ No

#### (A) POOL COMMINGLING

Please attach sheets with the following information

(1) Pool Names and Codes	Gravities / BTU of Non-Commingled Production	Calculated Gravities / BTU of Commingled Production		Calculated Value of Commingled Production	Volumes
Lusk; Bone Spring, South (41460)	38 degrees				SEE
Lusk; Delaware, East (41520)	39 degrees				ATTACHED

(2) Are any wells producing at top allowables? ☐ Yes ☒ No

(3) Has all interest owners been notified by certified mail of the proposed commingling? ☒ Yes ☐ No.

(4) Measurement type: ☐ Metering ☒ Other (Specify) WELL TESTS

(5) Will commingling decrease the value of production? ☐ Yes ☒ No If "yes", describe why commingling should be approved

#### (B) LEASE COMMINGLING

Please attach sheets with the following information

(1) Pool Name and Code.

(2) Is all production from same source of supply? ☐ Yes ☐ No

(3) Has all interest owners been notified by certified mail of the proposed commingling? ☐ Yes ☐ No

(4) Measurement type: ☐ Metering ☐ Other (Specify)

#### (C) POOL and LEASE COMMINGLING

Please attach sheets with the following information

(1) Complete Sections A and E.

#### (D) OFF-LEASE STORAGE and MEASUREMENT

Please attached sheets with the following information

(1) Is all production from same source of supply? ☐ Yes ☐ No

(2) Include proof of notice to all interest owners.

#### (E) ADDITIONAL INFORMATION (for all application types)

Please attach sheets with the following information

(1) A schematic diagram of facility, including legal location.

(2) A plat with lease boundaries showing all well and facility locations. Include lease numbers if Federal or State lands are involved.

(3) Lease Names, Lease and Well Numbers, and API Numbers.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE: Reesa Fisher TITLE: Sr Staff Regulatory Tech DATE: 10/9/2013

TYPE OR PRINT NAME REESA HOLLAND FISHER TELEPHONE NO.: 432-818-1062

E-MAIL ADDRESS: Reesa.Holland@apachecorp.com

October 7, 2013

Working Interest Owners

RE:     **Request for Approval to Surface (Pool) Commingle**  
          **Federal Lease Serial No. NMNM01135**  
          **Southeast Lusk 34 Federal #1** (*possible* recompletion to Lusk; Bone Spring, South Pool)  
          **Southeast Lusk 34 Federal #2** (Lusk; Delaware, East Pool)  
          **Southeast Lusk 34 Federal #3** (Lusk; Delaware, East Pool)  
          **Southeast Lusk 34 Federal #5** (Lusk; Delaware, East Pool)  
          **Lusk 34 Federal #1H** (Lusk; Bone Spring, South Pool)  
          **Lusk 34 Federal #2H** (Lusk; Bone Spring, South Pool)  
          Township 19 South, Range 32 East;  
          Section 34: W½  
          Lea County, New Mexico

Dear Interest Owners,

Apache Corporation ("Apache") hereby requests your approval to surface commingle production from the Southeast Lusk 34 Federal Well Nos. 1 (API No. 30-025-36439), 2 (API No. 30-025-37357), 3 (API No. 30-025-37358) and 5 (API No. 30-025-37680), Lusk 34 Federal Well Nos. 1H (API No. 30-025-40797) and 2H (API No. 30-025-40693), all located in the W½ of Section 34, Township 19 South, Range 32 East, Lea County, New Mexico. Apache plans to set a 3-phase separator for the vertical wells to flow through prior to commingling production from said wells with the horizontal wells at the Lusk 34 Federal No. 1H Battery, which is located on the referenced lands. This flow plan will allow Apache to meter production from the vertical wells separately from production from the horizontal wells. As for allocating production among the vertical wells, Apache requests your approval to allocate using monthly well tests (See attached Addition of Wells 1, 2, 3, & 5 Piping Plan and Details).

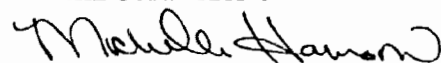
Please be aware that the working interest ownership is not identical among the wells and, therefore, in order to commingle production from each well at the surface and account for each well's production in the manner proposed above, Apache must first obtain approval from the affected interest owners.

Apache believes that commingling will not decrease the value of production from each well. Additionally, Apache believes commingling will prevent waste and promote conservation by utilizing the same tank battery equipment for each well, thereby reducing the incremental investment capital that would otherwise be needed to build a separate facility for each well containing difference in ownership and, as a result, will extend the economic life of the wells and leases.

Please evidence your approval of Apache's proposal by executing Page 2 and returning one (1) copy to my attention using the enclosed prepaid envelope provided for your convenience. Should you have any questions, please do not hesitate to contact me at (432) 818-1093.

Sincerely,

APACHE CORPORATION



Michelle Hanson

Landman

(432) 818-1190 fax

[Michelle.hanson@apachecorp.com](mailto:Michelle.hanson@apachecorp.com)

**Page 2 - Request for Approval to Surface (Pool) Commingle**  
**Southeast Lusk 34 Federal Well Nos. 1, 2, 3 and 5**  
**Lusk 34 Federal Well Nos. 1H and 2H**  
**October 7, 2013**

The undersigned hereby approves to surface commingle production from the Southeast Lusk 34 Federal Well Nos. 1, 2, 3 and 5 and Lusk 34 Federal Well Nos. 1H and 2H and further approves to account for each well's production in the manner set forth in this letter. This approval is subject to final approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Company: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2014

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.  
NMNM01135

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
Apache Corporation (873)

3a. Address  
303 Veterans Airpark Lane, Suite 3000  
Midland, TX 79705

3b. Phone No. (include area code)  
432/818-1062

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

See Below

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.  
See Below

9. API Well No.  
See Below

10. Field and Pool or Exploratory Area  
Lusk; Bone Spring, S(41460)/Lusk; Delaware, E(41520)

11. County or Parish, State  
Lea County, NM

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>SURFACE</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>COMMINGLE</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Apache would like to Surface Commingle the following wells, per the attached information:

Lusk 34 Federal #1H	30-025-40797	Bone Spring	Active	D-34-19S-32E 490 FNL 360 FWL
Lusk 34 Federal #2H	30-025-40693	Bone Spring	Active	C-34-19S-32E 330 FNL 1715 FWL
SE Lusk 34 Federal #1	30-025-36439	Morrow (RC to Bone Spring)	Active	E-34-19S-32E 1530 FNL 40 FWL
SE Lusk 34 Federal #2	30-025-37357	Cherry Canyon	Active	E-34-19S-32E 1750 FNL 530 FWL
SE Lusk 34 Federal #3	30-025-37358	Cherry Canyon	Active	D-34-19S-32E 330 FNL 330 FWL
SE Lusk 34 Federal #5	30-025-37680	Cherry Canyon	Active	C-34-19S-32E 990 FNL 1650 FWL

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Reesa Holland Fisher

Title Sr. Staff Reg Tech

Signature

*Reesa Fisher*

Date 10/09/2013

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Well Name	API	Formation	Status
Lusk 34 Federal #1H	3002540797	Bone Springs	ACTIVE
Lusk 34 Federal #2H	3002540693	Bone Springs	ACTIVE
Southeast Lusk 34 Federal #1	3002536439	Morrow/Atoka (Recompleting to Bone Springs)	ACTIVE, awaitng AFE approval to recomplete
Southeast Lusk 34 Federal #2	3002537357	Cherry Canyon	ACTIVE
Southeast Lusk 34 Federal #3	3002537358	Cherry Canyon	ACTIVE
Southeast Lusk 34 Federal #5	3002537680	Cherry Canyon	ACTIVE

# Well Test History Report

Select By: Field

Display: All well tests between 04/01/2013 - 09/30/2013

Test Date	Effective Date	Measured Hours	Type	24 Hour Volumes					Ratios					Fluid Level
				Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	
Field: LUSK (MARINER)														
LUSK 34 FEDERAL #1H														
4/6/2013	4/6/2013	24	A	10,424	244	78	10,180	192	320	7	787	18	26	
4/7/2013	4/7/2013	24	A	2,178	237	112	1,941	181	473	51	764	83	135	
4/9/2013	4/9/2013	24	A	1,149	185	63	964	116	341	55	627	101	156	
4/10/2013	4/10/2013	24	A	1,116	235	56	881	186	238	50	791	167	217	
4/16/2013	4/16/2013	24	A	582	172	90	410	182	523	155	1,058	313	467	
4/17/2013	4/17/2013	24	A	587	183	157	404	108	858	267	590	184	451	
4/21/2013	4/21/2013	24	A	660	220	87	440	192	395	132	873	291	423	
4/22/2013	4/22/2013	24	A	390	203	106	187	199	522	272	980	510	782	
4/23/2013	4/23/2013	24	A	381	170	70	211	175	412	184	1,029	459	643	
4/24/2013	4/24/2013	24	A	742	195	72	547	142	369	97	728	191	288	
4/25/2013	4/25/2013	24	A	887	207	10	680	216	48	11	1,043	244	255	
4/26/2013	4/26/2013	24	A	853	224	167	629	219	746	196	978	257	453	
4/27/2013	4/27/2013	24	A	933	235	39	698	201	166	42	855	215	257	
4/29/2013	4/29/2013	24	A	916	208	19	708	197	91	21	947	215	236	
5/1/2013	5/1/2013	24	A	835	209	170	626	197	813	204	943	236	440	
5/3/2013	5/3/2013	24	A	835	209	27	626	198	129	32	947	237	269	
5/4/2013	5/4/2013	24	A	747	204	107	543	183	525	143	897	245	388	
5/5/2013	5/5/2013	24	A	848	217	146	631	213	673	172	982	251	423	
5/7/2013	5/7/2013	24	A	796	240	100	556	283	417	126	1,179	356	481	
5/15/2013	5/15/2013	24	A	659	179	11	480	208	61	17	1,162	316	332	
5/16/2013	5/16/2013	24	A	609	174	65	435	203	374	107	1,167	333	440	
5/17/2013	5/17/2013	24	A	646	179	71	467	222	397	110	1,240	344	454	
5/18/2013	5/18/2013	24	A	591	190	74	401	219	389	125	1,153	371	496	
5/19/2013	5/19/2013	24	A	666	186	90	480	215	484	135	1,156	323	458	
5/20/2013	5/20/2013	24	A	758	212	149	546	225	703	197	1,061	297	493	
5/22/2013	5/22/2013	24	A	657	196	109	461	215	556	166	1,097	327	493	
5/23/2013	5/23/2013	24	A	562	188	122	374	206	649	217	1,096	367	584	
5/28/2013	5/28/2013	24	A	694	203	101	491	214	498	146	1,054	308	454	
5/29/2013	5/29/2013	24	A	664	194	199	470	230	1,026	300	1,186	346	646	
5/31/2013	5/31/2013	24	A	600	171	108	429	203	632	180	1,187	338	518	
6/2/2013	6/2/2013	24	A	721	179	182	542	230	1,017	252	1,285	319	571	
6/3/2013	6/3/2013	24	A	494	148	73	346	190	493	148	1,284	385	532	
6/4/2013	6/4/2013	24	A	193	93	53	100	170	570	275	1,828	881	1,155	
6/6/2013	6/6/2013	24	A	469	178	91	291	205	511	194	1,152	437	631	
6/7/2013	6/7/2013	24	A	328	112	4	216	191	36	12	1,705	582	595	
6/8/2013	6/8/2013	24	A	309	77	170	232	197	2,208	550	2,558	638	1,188	
6/9/2013	6/9/2013	24	A	498	128	147	370	200	1,148	295	1,563	402	697	

\*\* All values are recorded using imperial units.

# Well Test History Report

Page 2 of 8  
10/2/2013 2:28:20 pm

Select By: Field

Display: All well tests between 04/01/2013 - 09/30/2013

Test Date	Effective Date	Measured Hours	Type	24 Hour Volumes					Ratios					Fluid Level
				Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	
Field: LUSK (MARINER)														
LUSK 34 FEDERAL #1H														
6/10/2013	6/10/2013	24	A	542	129	65	413	195	504	120	1,512	360	480	
6/11/2013	6/11/2013	24	A	406	107	72	299	210	673	177	1,963	517	695	
6/12/2013	6/12/2013	24	A	420	115	72	305	204	626	171	1,774	486	657	
6/13/2013	6/13/2013	24	A	336	73	81	263	215	1,110	241	2,945	640	881	
6/14/2013	6/14/2013	24	A	513	105	105	408	182	1,000	205	1,733	355	559	
6/15/2013	6/15/2013	24	A	369	91	11	278	175	121	30	1,923	474	504	
6/16/2013	6/16/2013	24	A	458	93	6	365	214	65	13	2,301	467	480	
6/19/2013	6/19/2013	24	A	539	121	13	418	232	107	24	1,917	430	455	
6/22/2013	6/22/2013	24	A	442	117	0	325	246	0	0	2,103	557	557	
6/23/2013	6/23/2013	24	A	364	74	0	290	223	0	0	3,014	613	613	
6/24/2013	6/24/2013	24	A	469	105	20	364	191	190	43	1,819	407	450	
6/25/2013	6/25/2013	24	A	514	115	133	399	179	1,157	259	1,557	348	607	
6/27/2013	6/27/2013	24	A	396	100	44	296	173	440	111	1,730	437	548	
6/28/2013	6/28/2013	24	A	405	140	41	265	220	293	101	1,571	543	644	
6/29/2013	6/29/2013	24	A	304	64	2	240	262	31	7	4,094	862	868	
6/30/2013	6/30/2013	24	A	507	116	40	391	220	345	79	1,897	434	513	
7/3/2013	7/3/2013	24	A	367	105	41	262	243	390	112	2,314	662	774	
7/4/2013	7/4/2013	24	A	420	60	11	360	216	183	26	3,600	514	540	
7/5/2013	7/5/2013	24	A	306	94	58	212	183	617	190	1,947	598	788	
7/6/2013	7/6/2013	24	A	401	110	46	291	198	418	115	1,800	494	608	
7/7/2013	7/7/2013	24	A	362	67	45	295	187	672	124	2,791	517	641	
7/8/2013	7/8/2013	24	A	410	115	42	295	211	365	102	1,835	515	617	
7/10/2013	7/10/2013	24	A	371	121	64	250	220	529	173	1,818	593	765	
7/12/2013	7/12/2013	24	A	363	100	64	263	188	640	176	1,880	518	694	
7/13/2013	7/13/2013	24	A	316	76	50	240	183	658	158	2,408	579	737	
7/15/2013	7/15/2013	24	A	336	63	56	273	185	889	167	2,937	551	717	
7/16/2013	7/16/2013	24	A	388	122	55	266	205	451	142	1,680	528	670	
7/17/2013	7/17/2013	24	A	287	58	29	229	171	500	101	2,948	596	697	
7/18/2013	7/18/2013	24	A	368	103	53	265	178	515	144	1,728	484	628	
7/19/2013	7/19/2013	24	A	275	85	58	190	194	682	211	2,282	705	916	
7/20/2013	7/20/2013	24	A	426	99	202	327	214	2,040	474	2,162	502	977	
7/21/2013	7/21/2013	24	A	253	81	22	172	185	272	87	2,284	731	818	
7/22/2013	7/22/2013	24	A	363	122	53	241	197	434	146	1,615	543	689	
7/23/2013	7/23/2013	24	A	255	63	60	192	219	952	235	3,476	859	1,094	
7/24/2013	7/24/2013	24	A	322	115	55	207	190	478	171	1,652	590	761	
7/25/2013	7/25/2013	24	A	251	87	61	164	191	701	243	2,195	761	1,004	
7/26/2013	7/26/2013	24	A	270	90	60	180	204	667	222	2,267	756	978	

\*\* All values are recorded using imperial units.



# Well Test History Report

Page 3 of 8  
10/2/2013 2:28:20 pm

Select By: Field

Display: All well tests between 04/01/2013 - 09/30/2013

Test Date	Effective Date	Measured Hours	Type	24 Hour Volumes					Ratios					Fluid Level
				Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	
Field: LUSK (MARINER)														
LUSK 34 FEDERAL #1H														
7/27/2013	7/27/2013	24	A	266	72	56	194	199	778	211	2,764	748	959	
7/28/2013	7/28/2013	24	A	310	102	62	208	207	608	200	2,029	668	868	
7/31/2013	7/31/2013	24	A	359	130	61	229	176	469	170	1,354	490	660	
8/4/2013	8/4/2013	24	A	197	75	57	122	172	760	289	2,293	873	1,162	
8/6/2013	8/6/2013	24	A	191	72	57	119	187	792	298	2,597	979	1,277	
8/7/2013	8/7/2013	24	A	206	51	63	155	184	1,235	306	3,608	893	1,199	
8/8/2013	8/8/2013	24	A	213	80	60	133	193	750	282	2,413	906	1,188	
8/9/2013	8/9/2013	24	A	206	76	63	130	182	829	306	2,395	883	1,189	
8/10/2013	8/10/2013	24	A	217	84	57	133	194	679	263	2,310	894	1,157	
8/12/2013	8/12/2013	24	A	241	78	62	163	197	795	257	2,526	817	1,075	
8/13/2013	8/13/2013	24	A	231	77	118	154	179	1,532	511	2,325	775	1,286	
8/14/2013	8/14/2013	24	A	209	81	37	128	167	457	177	2,062	799	976	
8/15/2013	8/15/2013	24	A	202	78	40	124	187	513	198	2,397	926	1,124	
8/16/2013	8/16/2013	24	A	200	70	35	130	168	500	175	2,400	840	1,015	
8/17/2013	8/17/2013	24	A	220	80	43	140	173	538	195	2,163	786	982	
8/19/2013	8/19/2013	24	A	251	74	0	177	75	0	0	1,014	299	299	
8/22/2013	8/22/2013	24	A	190	75	38	115	161	507	200	2,147	847	1,047	
8/23/2013	8/23/2013	24	A	187	77	62	110	168	805	332	2,182	898	1,230	
8/24/2013	8/24/2013	24	A	240	90	154	150	210	1,711	642	2,333	875	1,517	
8/27/2013	8/27/2013	24	A	187	47	27	140	149	574	144	3,170	797	941	
8/28/2013	8/28/2013	24	A	239	68	45	171	160	662	188	2,353	669	858	
8/29/2013	8/29/2013	24	A	173	52	43	121	142	827	249	2,731	821	1,069	
8/30/2013	8/30/2013	24	A	183	52	68	131	163	1,308	372	3,135	891	1,262	
8/31/2013	8/31/2013	24	A	310	100	49	210	174	490	158	1,740	561	719	
9/1/2013	9/1/2013	24	A	168	58	110	110	171	1,897	655	2,948	1,018	1,673	
9/3/2013	9/3/2013	24	A	227	80	28	147	169	350	123	2,113	744	868	
9/6/2013	9/6/2013	24	A	282	54	46	228	152	852	163	2,815	539	702	
9/9/2013	9/9/2013	24	A	186	64	58	122	164	906	312	2,563	882	1,194	
9/13/2013	9/13/2013	24	A	210	80	52	130	154	650	248	1,925	733	981	
9/14/2013	9/14/2013	24	A	150	50	48	100	154	960	320	3,080	1,027	1,347	
9/15/2013	9/15/2013	24	A	120	30	42	90	141	1,400	350	4,700	1,175	1,525	
9/16/2013	9/16/2013	24	A	300	80	23	220	118	288	77	1,475	393	470	
9/17/2013	9/17/2013	24	A	191	74	170	117	187	2,297	890	2,527	979	1,869	
9/22/2013	9/22/2013	24	A	224	73	66	151	196	904	295	2,685	875	1,170	
9/25/2013	9/25/2013	24	A	164	54	59	110	162	1,093	360	3,000	988	1,348	
9/29/2013	9/29/2013	24	A	170	60	43	110	142	717	253	2,367	835	1,088	
Averages by Completion				526	120	68	406	190						

\*\* All values are recorded using imperial units.

# Well Test History Report

Select By: Field

Display: All well tests between 04/01/2013 - 09/30/2013

Test Date	Effective Date	Measured Hours	Type	24 Hour Volumes					Ratios					Fluid Level
				Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	
Field: LUSK (MARINER)														
LUSK 34 FEDERAL #2H														
4/6/2013	4/6/2013	24	A	1,324	244	23	1,080	263	94	17	1,078	199	216	
4/7/2013	4/7/2013	24	A	1,177	237	121	940	257	511	103	1,084	218	321	
4/9/2013	4/9/2013	24	A	699	152	54	547	122	355	77	803	175	252	
4/10/2013	4/10/2013	24	A	1,118	236	87	882	242	369	78	1,025	216	294	
4/16/2013	4/16/2013	24	A	1,093	188	156	905	228	830	143	1,213	209	351	
4/17/2013	4/17/2013	24	A	1,079	202	199	877	240	985	184	1,188	222	407	
4/21/2013	4/21/2013	24	A	1,232	202	197	1,030	251	975	160	1,243	204	364	
4/22/2013	4/22/2013	24	A	1,797	290	166	1,507	247	572	92	852	137	230	
4/23/2013	4/23/2013	24	A	1,583	229	189	1,354	233	825	119	1,017	147	267	
4/24/2013	4/24/2013	24	A	841	221	105	620	220	475	125	995	262	386	
4/25/2013	4/25/2013	24	A	1,114	272	121	842	241	445	109	886	216	325	
4/26/2013	4/26/2013	24	A	916	251	22	665	256	88	24	1,020	279	303	
4/27/2013	4/27/2013	24	A	915	260	150	655	254	577	164	977	278	442	
4/29/2013	4/29/2013	24	A	1,004	215	193	789	255	898	192	1,186	254	446	
5/1/2013	5/1/2013	24	A	907	233	338	674	254	1,451	373	1,090	280	653	
5/3/2013	5/3/2013	24	A	844	208	126	636	263	606	149	1,264	312	461	
5/4/2013	5/4/2013	24	A	825	211	129	614	280	611	156	1,327	339	496	
5/5/2013	5/5/2013	24	A	877	231	173	646	280	749	197	1,212	319	517	
5/7/2013	5/7/2013	24	A	818	229	179	589	317	782	219	1,384	388	606	
5/15/2013	5/15/2013	24	A	712	199	165	513	295	829	232	1,482	414	646	
5/16/2013	5/16/2013	24	A	674	208	177	466	281	851	263	1,351	417	680	
5/17/2013	5/17/2013	24	A	707	205	172	502	284	839	243	1,385	402	645	
5/18/2013	5/18/2013	24	A	620	199	173	421	269	869	279	1,352	434	713	
5/19/2013	5/19/2013	24	A	706	199	171	507	264	859	242	1,327	374	616	
5/20/2013	5/20/2013	24	A	761	211	120	550	271	569	158	1,284	356	514	
5/22/2013	5/22/2013	24	A	691	208	149	483	289	716	216	1,389	418	634	
5/23/2013	5/23/2013	24	A	578	195	138	383	272	708	239	1,395	471	709	
5/28/2013	5/28/2013	24	A	723	219	118	504	290	539	163	1,324	401	564	
5/29/2013	5/29/2013	24	A	697	212	58	485	316	274	83	1,491	453	537	
5/31/2013	5/31/2013	24	A	626	178	113	448	302	635	181	1,697	482	663	
6/2/2013	6/2/2013	24	A	719	176	64	543	321	364	89	1,824	446	535	
6/3/2013	6/3/2013	24	A	528	164	115	364	297	701	218	1,811	563	780	
6/4/2013	6/4/2013	24	A	210	99	78	111	252	788	371	2,545	1,200	1,571	
6/6/2013	6/6/2013	24	A	782	187	167	595	263	893	214	1,406	336	550	
6/7/2013	6/7/2013	24	A	356	120	98	236	260	817	275	2,167	730	1,006	
6/8/2013	6/8/2013	24	A	317	79	71	238	230	899	224	2,911	726	950	

\*\* All values are recorded using imperial units.

# Well Test History Report

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Select By: Field

Display: All well tests between 04/01/2013 - 09/30/2013

Test Date	Effective Date	Measured Hours	Type	24 Hour Volumes					Ratios					Fluid Level
				Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	
Field: LUSK (MARINER)														
LUSK 34 FEDERAL #2H														
6/9/2013	6/9/2013	24	A	516	136	199	380	243	1,463	386	1,787	471	857	
6/10/2013	6/10/2013	24	A	563	140	156	423	253	1,114	277	1,807	449	726	
6/11/2013	6/11/2013	24	A	432	107	156	325	263	1,458	361	2,458	609	970	
6/12/2013	6/12/2013	24	A	432	124	144	308	256	1,161	333	2,065	593	926	
6/13/2013	6/13/2013	24	A	398	74	78	324	190	1,054	196	2,568	477	673	
6/14/2013	6/14/2013	24	A	553	121	114	432	226	942	206	1,868	409	615	
6/15/2013	6/15/2013	24	A	399	101	43	298	216	426	108	2,139	541	649	
6/16/2013	6/16/2013	24	A	475	110	225	365	286	2,045	474	2,600	602	1,076	
6/19/2013	6/19/2013	24	A	603	140	143	463	292	1,021	237	2,086	484	721	
6/22/2013	6/22/2013	24	A	467	125	170	342	309	1,360	364	2,472	662	1,026	
6/23/2013	6/23/2013	24	A	391	82	6	309	263	73	15	3,207	673	688	
6/24/2013	6/24/2013	24	A	490	117	164	373	273	1,402	335	2,333	557	892	
6/25/2013	6/25/2013	24	A	532	122	145	410	248	1,189	273	2,033	466	739	
6/27/2013	6/27/2013	24	A	414	111	86	303	214	775	208	1,928	517	725	
6/28/2013	6/28/2013	24	A	421	151	217	270	266	1,437	515	1,762	632	1,147	
6/29/2013	6/29/2013	24	A	315	69	101	246	216	1,464	321	3,130	686	1,006	
6/30/2013	6/30/2013	24	A	523	124	184	399	265	1,484	352	2,137	507	859	
7/3/2013	7/3/2013	24	A	408	124	199	284	295	1,605	488	2,379	723	1,211	
7/4/2013	7/4/2013	24	A	405	69	12	336	264	174	30	3,826	652	681	
7/5/2013	7/5/2013	24	A	335	107	67	228	250	626	200	2,336	746	946	
7/6/2013	7/6/2013	24	A	427	119	155	308	255	1,303	363	2,143	597	960	
7/7/2013	7/7/2013	24	A	380	82	11	298	235	134	29	2,866	618	647	
7/8/2013	7/8/2013	24	A	457	130	206	327	264	1,585	451	2,031	578	1,028	
7/10/2013	7/10/2013	24	A	406	138	138	268	287	1,000	340	2,080	707	1,047	
7/12/2013	7/12/2013	24	A	386	109	67	277	240	615	174	2,202	622	795	
7/13/2013	7/13/2013	24	A	349	83	105	266	228	1,265	301	2,747	653	954	
7/15/2013	7/15/2013	24	A	315	56	9	259	274	161	29	4,893	870	898	
7/16/2013	7/16/2013	24	A	405	131	148	274	254	1,130	365	1,939	627	993	
7/17/2013	7/17/2013	24	A	307	63	9	244	214	143	29	3,397	697	726	
7/18/2013	7/18/2013	24	A	370	104	132	266	235	1,269	357	2,260	635	992	
7/19/2013	7/19/2013	24	A	285	89	8	196	241	90	28	2,708	846	874	
7/20/2013	7/20/2013	24	A	414	97	95	317	255	979	229	2,629	616	845	
7/21/2013	7/21/2013	24	A	253	76	17	177	202	224	67	2,658	798	866	
7/22/2013	7/22/2013	24	A	386	131	118	255	233	901	306	1,779	604	909	
7/23/2013	7/23/2013	24	A	248	60	6	188	249	100	24	4,150	1,004	1,028	
7/24/2013	7/24/2013	24	A	344	127	94	217	238	740	273	1,874	692	965	
7/25/2013	7/25/2013	24	A	254	89	5	165	240	56	20	2,697	945	965	

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# Well Test History Report

Select By: Field

Display: All well tests between 04/01/2013 - 09/30/2013

Test Date	Effective Date	Measured Hours	Type	24 Hour Volumes					Ratios					Fluid Level
				Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	
Field: LUSK (MARINER)														
LUSK 34 FEDERAL #2H														
7/26/2013	7/26/2013	24	A	284	97	89	187	255	918	313	2,629	898	1,211	
7/27/2013	7/27/2013	24	A	294	83	7	211	244	84	24	2,940	830	854	
7/28/2013	7/28/2013	24	A	324	110	90	214	269	818	278	2,445	830	1,108	
7/31/2013	7/31/2013	24	A	382	138	146	244	241	1,058	382	1,746	631	1,013	
8/4/2013	8/4/2013	24	A	231	79	75	152	224	949	325	2,835	970	1,294	
8/6/2013	8/6/2013	24	A	203	78	27	125	160	346	133	2,051	788	921	
8/7/2013	8/7/2013	24	A	232	56	97	176	118	1,732	418	2,107	509	927	
8/8/2013	8/8/2013	24	A	263	98	28	165	251	286	106	2,561	954	1,061	
8/9/2013	8/9/2013	24	A	226	84	2	142	235	24	9	2,798	1,040	1,049	
8/10/2013	8/10/2013	24	A	247	99	96	148	247	970	389	2,495	1,000	1,389	
8/12/2013	8/12/2013	24	A	266	87	58	179	238	667	218	2,736	895	1,113	
8/13/2013	8/13/2013	24	A	265	94	68	171	232	723	257	2,468	875	1,132	
8/14/2013	8/14/2013	24	A	270	101	1	169	209	10	4	2,069	774	778	
8/15/2013	8/15/2013	24	A	240	100	124	140	228	1,240	517	2,280	950	1,467	
8/16/2013	8/16/2013	24	A	248	98	-9	150	206	-92	-36	2,102	831	794	
8/17/2013	8/17/2013	24	A	250	90	145	160	211	1,611	580	2,344	844	1,424	
8/22/2013	8/22/2013	24	A	237	98	205	139	200	2,092	865	2,041	844	1,709	
8/23/2013	8/23/2013	24	A	224	99	202	125	210	2,040	902	2,121	938	1,839	
8/24/2013	8/24/2013	24	A	278	109	35	169	265	321	126	2,431	953	1,079	
8/27/2013	8/27/2013	24	A	251	61	11	190	186	180	44	3,049	741	785	
8/28/2013	8/28/2013	24	A	288	91	160	197	199	1,758	556	2,187	691	1,247	
8/29/2013	8/29/2013	24	A	222	66	42	156	180	636	189	2,727	811	1,000	
8/30/2013	8/30/2013	24	A	231	64	-8	167	194	-125	-35	3,031	840	805	
8/31/2013	8/31/2013	24	A	346	115	107	231	204	930	309	1,774	590	899	
9/1/2013	9/1/2013	24	A	200	70	71	130	212	1,014	355	3,029	1,060	1,415	
9/2/2013	9/2/2013	24	A	266	99	1	167	222	10	4	2,242	835	838	
9/6/2013	9/6/2013	24	A	396	75	175	321	213	2,333	442	2,840	538	980	
9/9/2013	9/9/2013	24	A	248	93	178	155	230	1,914	718	2,473	927	1,645	
9/13/2013	9/13/2013	24	A	270	100	127	170	249	1,270	470	2,490	922	1,393	
9/14/2013	9/14/2013	24	A	192	55	16	137	251	291	83	4,564	1,307	1,391	
9/15/2013	9/15/2013	24	A	195	64	29	131	229	453	149	3,578	1,174	1,323	
9/16/2013	9/16/2013	24	A	337	100	30	237	217	300	89	2,170	644	733	
9/17/2013	9/17/2013	24	A	241	91	162	150	251	1,780	672	2,758	1,041	1,714	
9/22/2013	9/22/2013	24	A	266	92	191	174	241	2,076	718	2,620	906	1,624	
9/25/2013	9/25/2013	24	A	241	85	133	156	199	1,565	552	2,341	826	1,378	
9/29/2013	9/29/2013	24	A	218	78	45	140	188	577	206	2,410	862	1,069	
9/30/2013	9/30/2013	24	A	197	80	142	117	206	1,775	721	2,575	1,046	1,766	

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# Well Test History Report

Select By: Field

Display: All well tests between 04/01/2013 - 09/30/2013

Test Date	Effective Date	Measured Hours	Type	24 Hour Volumes					Ratios					Fluid Level
				Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	
Field: LUSK (MARINER)														
Averages by Completion				502	133	108	369	244						
LUSK SE 34 FED #1 (ATOKA)														
9/12/2013	9/12/2013	24	A	5	0	180	5	0	36,000		0		36,000	
Averages by Completion				5	0	180	5	0						
LUSK SE 34 FED #1 (MORROW)														
4/17/2013	4/17/2013	24	A	3	1	146	2	0	292,000	58,400	0	0	58,400	
5/9/2013	5/9/2013	24	A	1	1	140	0	0	140,000	140,000	0	0	140,000	
8/24/2013	8/24/2013	24	A	0	0	180	0	0						
8/25/2013	8/25/2013	24	A	0	0	219	0	0						
8/26/2013	8/26/2013	24	A	6	3	224	3	0	74,667	37,333	0	0	37,333	
8/27/2013	8/27/2013	24	A	8	3	225	5	0	75,000	28,125	0	0	28,125	
Averages by Completion				3	1	189	2	0						
LUSK SE 34 FED 2 (DELAWARE)														
4/10/2013	4/10/2013	24	A	71	70	88	1	0	1,257	1,239	0	0	1,239	
5/15/2013	5/15/2013	24	A	72	71	92	1	0	1,296	1,278	0	0	1,278	
6/20/2013	6/20/2013	24	A	73	72	93	1	0	1,292	1,274	0	0	1,274	
7/18/2013	7/18/2013	24	A	74	73	94	1	0	1,288	1,270	0	0	1,270	
8/9/2013	8/9/2013	24	A	74	73	94	1	0	1,288	1,270	0	0	1,270	
9/10/2013	9/10/2013	24	A	71	70	95	1	0	1,357	1,338	0	0	1,338	
Averages by Completion				73	72	93	1	0						
LUSK SE 34 FEDERAL #3														
4/25/2013	4/25/2013	24	A	97	14	33	83	0	2,357	340	0	0	340	
5/24/2013	5/24/2013	24	A	94	14	35	80	0	2,500	372	0	0	372	
6/13/2013	6/13/2013	24	A	92	15	36	77	0	2,400	391	0	0	391	
7/9/2013	7/9/2013	24	A	94	15	35	79	0	2,333	372	0	0	372	
8/15/2013	8/15/2013	24	A	96	16	38	80	0	2,375	396	0	0	396	
9/9/2013	9/9/2013	24	A	90	15	32	75	0	2,133	356	0	0	356	
Averages by Completion				94	15	35	79	0						
LUSK SE 34 FEDERAL #5														

\*\* All values are recorded using imperial units.

# Well Test History Report

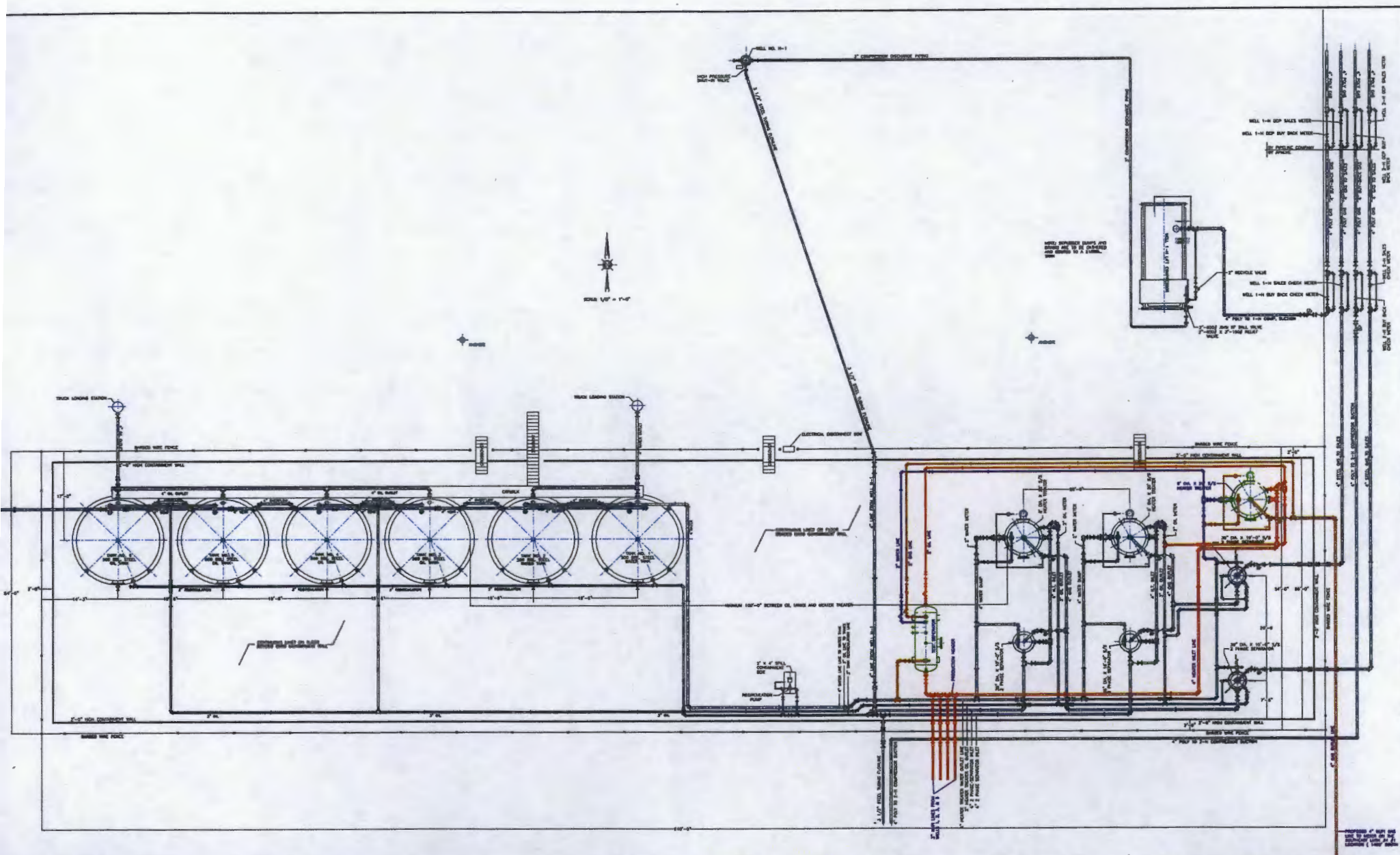
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Select By: Field

Display: All well tests between 04/01/2013 - 09/30/2013

Test Date	Effective Date	Mcasured Hours	Type	24 Hour Volumes					Ratios					Fluid Level
				Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	
Field: LUSK (MARINER)														
LUSK SE 34 FEDERAL #5														
4/8/2013	4/8/2013	24	A	45	1	1	44	0	1,000	22	0	0	22	
5/15/2013	5/15/2013	24	A	31	1	1	30	0	1,000	32	0	0	32	
6/19/2013	6/19/2013	24	A	31	1	1	30	0	1,000	32	0	0	32	
7/27/2013	7/27/2013	24	A	23	1	1	22	0	1,000	43	0	0	43	
8/15/2013	8/15/2013	24	A	23	1	1	22	0	1,000	43	0	0	43	
9/20/2013	9/20/2013	24	A	26	1	1	25	0	1,000	38	0	0	38	
Averages by Completion				30	1	1	29	0						

\*\* All values are recorded using imperial units.



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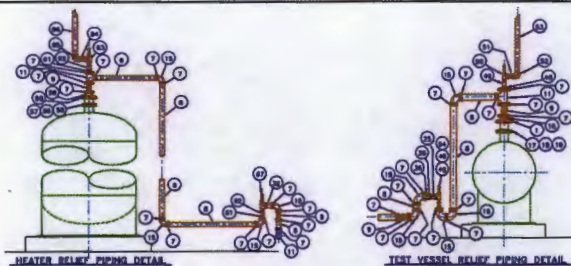
REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	REVISION DESCRIPTION



APACHE  
SOUTHEAST LUSK  
34 FEDERAL NO. 1-H BATTERY  
EDDY COUNTY, NEW MEXICO

ADDITION OF WELLS 1, 2, 3, & 5  
PIPING PLAN AND DETAILS  
DRAWN BY: p.j.b.  
DATE: 13/4/13  
CHECKED BY:  
DRAWING NO. 13-119-01





# BILL OF MATERIAL

ITEM	QTY	DESCRIPTION
1	40	4" QUICH-VC 100 VICTROLIC COUPLING W/ENDURAL GASKET
2	1	4" NDL 80 VICTROLIC CUP, PC
3	1	2" NDL 80 VICTROLIC CUP, PC
4	100'	4" SCH. 40 STEEL PIPE, PC
5	10	4" x 8" NPT 10 VICTROLIC ELL, PC
6	8	4" x 4" x 2" NDL 20 VICTROLIC TEE, PC
7	127	2" QUICH-VC 100 VICTROLIC COUPLING W/ENDURAL GASKET
8	140'	2" SCH. 40 STEEL PIPE, PC
9	22	2" SERIES 701 VICTROLIC BALL VALVE, 316SS, TRIM
10	8	2" SERIES 712 VICTROLIC CHECK VALVE, PC, 316SS, TRIM
11	13	2" x 2" NDL 20 VICTROLIC TEE, PC
12	10	2" x 4" NPT 11 VICTROLIC ELL, PC
13	3	4" x 8" LONG BROOKS END NIPPLE, PC

ITEM	QTY	DESCRIPTION
20	2	4" NDL 40 NPT x BROOKS VICTROLIC NIPPLE, 4" LONG, PC
21	2	2"-100' AND 8" GASKET, FLEX.
22	12	3/8" x 3 1/2" LONG 8-7 STUDS W/NUTS
23	1	2"-100' AND 8" BROAD FLANGE, PC
24	4	2"-100' AND 8" THREADED FLANGE, PC
25	2	2" NDL 40 NPT x BROOKS VICTROLIC NIPPLE, 4" LONG, PC
26	29	2" QUICH-VC 100 VICTROLIC COUPLING W/ENDURAL GASKET
27	7	2" SERIES 701 VICTROLIC BALL VALVE, 316SS
28	1	2" NDL 80 VICTROLIC CUP, PC
29	8	2"-100' AND 8" GASKET, FLEX.
30	6	3/8" x 3 1/2" LONG 8-7 STUDS W/NUTS
31	8	2"-100' AND 8" THREADED FLANGE, PC
32	11	2" NDL 40 NPT x BROOKS VICTROLIC NIPPLE, 4" LONG, PC
33	3	4" BROOKS END NIPPLE ADAPTER, PC
34	3	4" x 2" NDL 80 VICTROLIC REDUCER, PC
35	3	2" x 2" NDL 80 VICTROLIC REDUCER, PC
36	300'	2" SCH. 40 STEEL PIPE, PC
37	1	2" x 8" NPT 10 VICTROLIC ELL, PC
38	1	2" BROOKS END NIPPLE DUMP VALVE
39	7	2" x 1" LONG BROOKS END NIPPLE, SCH. 40, PC
40	1	2" BROOKS END NIPPLE METER W/ANALYTIC PICKUP & FLOW ANALYZER, 316SS
41	1	2" BROOKS END NIPPLE METER W/ANALYTIC PICKUP & FLOW ANALYZER
42	1	2" BROOKS END NIPPLE METER W/ANALYTIC PICKUP & FLOW ANALYZER
43	2	2" SERIES 712 VICTROLIC CHECK VALVE, PC, 316SS, TRIM
44	1	2" BROOKS END NIPPLE DUMP VALVE
45	1	2" x 2" NDL 80 VICTROLIC REDUCER, PC
46	1	2" HALLIBURTON GAS TURNING FLOW METER W/ANALYTIC PICKUP & FLOW ANALYZER
47	4	3/8" x 3 1/2" LONG 8-7 STUDS W/NUTS
48	2	2" x 1" NDL 80 VICTROLIC REDUCER, THREADED SMALL, PC
49	2	1" NPT PIPE COLLAR, 3000#, 316SS
50	1	1" x 2" NPT x 1" NPT RELIEF VALVE, SET @ 150 PSIG
51	1	2" x 2" NDL 80 VICTROLIC REDUCER, PC
52	1	2" x 8" NPT 10 VICTROLIC ELL, 3000#, WITH 1/2" DIA. DEEP HOLE
53	1	2" x 2" NDL 80 VICTROLIC REDUCER, PC
54	1	1" NPT x 2" NPT RELIEF VALVE, SET @ 150 PSIG
55	2	2"-100' AND 8" GASKET, FLEX.
56	10	3/8" x 3 1/2" LONG 8-7 STUDS W/NUTS
57	2	2" QUICH-VC 100 VICTROLIC COUPLING W/ENDURAL GASKET
58	2	2" QUICH-VC 100 VICTROLIC COUPLING W/ENDURAL GASKET
59	1	2" x 2" NDL 80 VICTROLIC REDUCER, PC
60	1	2" x 2" NDL 80 VICTROLIC REDUCER, PC
61	2	2" x 2" NDL 80 VICTROLIC REDUCER, THREADED SMALL, PC
62	2	2" NPT PIPE COLLAR, 3000#, 316SS
63	1	2" NPT x 2" NPT RELIEF VALVE, SET @ 75 PSIG
64	1	2" x 2" NDL 80 VICTROLIC REDUCER, PC
65	1	2" x 8" NPT 10 VICTROLIC ELL, 3000#, WITH 1/2" DIA. DEEP HOLE
66	1	2" x 2" NDL 80 VICTROLIC REDUCER, PC
67	1	2" NPT x 2" NPT RELIEF VALVE, SET @ 75 PSIG
68	2	2"-100' AND 8" GASKET, FLEX.
69	10	3/8" x 3 1/2" LONG 8-7 STUDS W/NUTS
70	2	2"-100' AND 8" GASKET, FLEX.
71	2	2" QUICH-VC 100 VICTROLIC COUPLING W/ENDURAL GASKET
72	1	2" x 2" NDL 80 VICTROLIC REDUCER, PC
73	2	2" SERIES 701 VICTROLIC BALL VALVE, 316SS, TRIM
74	1	4" x 4" NDL 20 VICTROLIC TEE, PC
75	1	4" x 4" NDL 20 VICTROLIC REDUCER, PC
76	2	2" x 2" NDL 20 VICTROLIC REDUCER, PC
77	1	2" NPT GAS BACK PRESSURE VALVE
78	1	4" x 4" NDL 20 VICTROLIC TEE, PC
79	1	2"-100' AND 8" THREADED UNDER DUMP VALVE
80	1	2"-100' AND 8" THREADED UNDER DUMP VALVE
81	1	2" BROOKS END NIPPLE DUMP VALVE
82	1	2" NPT BALL VALVE, 3000#, 316SS
83	7	1" x 4" LONG NPT NIPPLE, SCH. 40
84	1	1" x 1" NPT TEE, 3000#
85	3	1" x 8" NPT 10 VICTROLIC ELL, 3000#
86	3	1" NPT NIPPLE, 3000#
87	1	1" SCH. 40 STEEL PIPE, 140'
88	1	1" x 1/2" NPT REDUCING BUSHING
89	1	1/2" x 4" LONG NPT NIPPLE, SCH. 40
90	1	1/2" NPT BALL VALVE, 3000#, 316SS
91	1	PURGE GAS SUPPLY BY THERMO MANUFACTURER
92	1	4" NPT PIPE

14	3	2" x 2" 1/2" LONG BROOKS END NIPPLE, PC
15	21	2" x 8" NPT 10 VICTROLIC ELL, PC
16	8	4" x 2" NDL 20 VICTROLIC REDUCER, PC
17	3	2"-100' AND 8" GASKET, FLEX.
18	3	3/8" x 3 1/2" LONG 8-7 STUDS W/NUTS
19	3	2"-100' AND 8" THREADED FLANGE, PC

NUMBER	DESCRIPTION	DATE	REVISION	DESCRIPTION

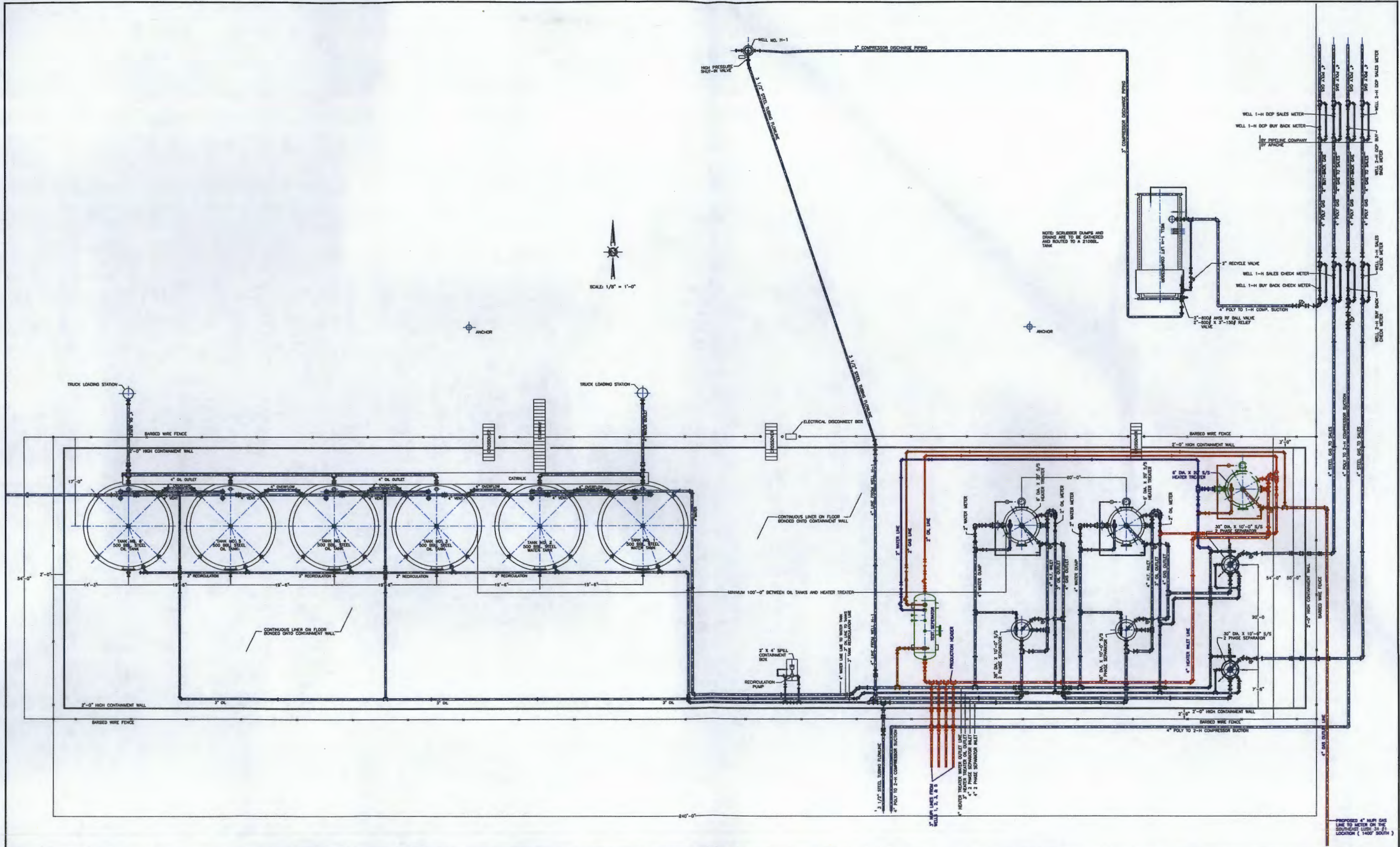


APACHE  
SOUTHEAST LUSK  
34 FEDERAL NO. 1-H BATTERY  
EDDY COUNTY, NEW MEXICO

ADDITION OF WELLS 1, 2, 3, & 5  
EAST END PIPING PLAN  
DRAWN BY: p.j.b.  
DATE: 10/2/13  
CHECKED BY:  
DRAWING NO. 13-119-02

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REFERENCE DRAWINGS		REVISIONS		
NUMBER	DESCRIPTION	DATE	REVISION	DESCRIPTION



APACHE  
SOUTHEAST LUSK  
34 FEDERAL NO. 1-H BATTERY  
EDDY COUNTY, NEW MEXICO

ADDITION OF WELLS 1, 2, 3, & 5  
PIPING PLAN AND DETAILS  
DRAWN BY: p.j.b.  
DATE: 13/4/13  
CHECKED BY:  
DRAWING NO. 13-119-01



SCALE: 1/4" = 1'-0"

HEATER RELIEF PIPING DETAIL

TEST VESSEL RELIEF PIPING DETAIL

GAS METER @ SOUTHEAST LUSK 34-1  
TO BE INSTALLED BY APACHE

BILL OF MATERIAL

ITEM	QTY	DESCRIPTION
1	48	4" QUICK-VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
2	1	4" NO. 80 VICTAULIC CAP, IPC
3	1	3" NO. 80 VICTAULIC CAP, IPC
4	180'	4" SCH. 40 STEEL PIPE, IPC
5	10	4" X 80' NO. 10 VICTAULIC ELL, IPC
6	6	4" X 4" X 3" NO. 25 VICTAULIC TEE, IPC
7	137	3" QUICK-VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
8	140'	3" SCH. 40 STEEL PIPE, IPC
9	22	3" SERIES 721 VICTAULIC BALL VALVE, 316SS. TRIM
10	5	3" SERIES 712 VICTAULIC CHECK VALVE, IPC, 316SS. TRIM
11	13	3" X 3" NO. 20 VICTAULIC TEE, IPC
12	12	3" X 45' NO. 11 VICTAULIC ELL, IPC
13	3	4" X 6" LONG GROOVED END NIPPLE, IPC

ITEM	QTY	DESCRIPTION
20	3	4" NO. 40 NPT X GROOVED VICTAULIC NIPPLE, 6" LONG, IPC
21	5	2"-150# ANSI RF GASKET, FLEX.
22	12	5/8" X 3 1/4" LONG B-7 STUDS W/NUTS
23	1	2"-150# ANSI RF BLIND FLANGE, IPC
24	4	2"-150# ANSI RF THREADED FLANGE, IPC
25	3	3" NO. 40 NPT X GROOVED VICTAULIC NIPPLE, 4" LONG, IPC
26	79	3" QUICK-VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
27	7	2" SERIES 721 VICTAULIC BALL VALVE, 316SS.
28	1	2" NO. 80 VICTAULIC CAP, IPC
29	6	3"-150# ANSI RF GASKET, FLEX.
30	6	5/8" X 3 1/2" LONG B-7 STUDS W/NUTS
31	6	3"-150# ANSI RF THREADED FLANGE, IPC
32	11	3" NO. 40 NPT X GROOVED VICTAULIC NIPPLE, 4" LONG, IPC
33	5	4" GROOVED STEEL X NUT ADAPTER, IPC
34		O E L E T E D
35	3	6" X 2" NO. 50 VICTAULIC REDUCER, IPC
36	6	3" X 2" NO. 50 VICTAULIC REDUCER, IPC
37	300'	2" SCH. 40 STEEL PIPE, IPC
38	18	2" X 90' NO. 10 VICTAULIC ELL, IPC
39	1	2" GROOVED END WATER DUMP VALVE
40	7	2" X 10" LONG GROOVED END NIPPLE, SCH. 40, IPC
41	4	2" GROOVED END TURBINE METER W/MAGNETIC PICKUP & FLOW ANALYZER, 316SS.
42	1	2" GROOVED END GS BACK PRESSURE VALVE
43	3	2" SERIES 712 VICTAULIC CHECK VALVE, IPC, 316SS. TRIM
44	1	2" GROOVED END OIL DUMP VALVE
45	1	2" X 3'-4" LONG NPT X GROOVED STEEL PIPE, IPC
46	1	2" HALLIBURTON GAS TURBINE FLOW METER W/MAGNETIC PICKUP & FLOW ANALYZER
47	4	5/8" X 6" LONG B-7 STUDS W/NUTS
48	2	3" X 1" NO. 52 VICTAULIC REDUCER, THREADED SMALL, IPC
49	2	1" NPT PIPE COLLAR, 2000#, 316SS.
50	1	1" X 2" MNPT X FNPT RELIEF VALVE, SET @ 125 PSIG
51	1	2" X 6" LONG SCH. 40 NPT NIPPLE
52	1	2" X 90' NPT ELL, 2000#, WITH 1/8" DIA. WEEP HOLE
53	1	2" X 36" LONG SCH. 40 NPT NIPPLE
54	1	1" MNPT X 2" FNPT RELIEF VALVE, SET @ 120 PSIG
55	2	6"-150# ANSI RF GASKET, FLEX.
56	18	3/4" X 4" LONG B-7 STUDS W/NUTS
57	2	6"-150# RF FLANGED X GROOVED ADAPTER, IPC
58	2	6" QUICK-VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
59	1	6" X 3" NO. 50 VICTAULIC REDUCER, IPC
60	1	6" X 4" NO. 50 VICTAULIC REDUCER, IPC
61	2	3" X 2" NO. 52 VICTAULIC REDUCER, THREADED SMALL, IPC
62	2	2" NPT PIPE COLLAR, 2000#, 316SS.
63	1	2" MNPT X 3" FNPT RELIEF VALVE, SET @ 75 PSIG
64	1	3" X 6" LONG NPT NIPPLE, SCH. 40
65	1	3" X 90' NPT ELL, 2000#, WITH 1/8" DIA. WEEP HOLE
66	1	3" X 36" LONG NPT NIPPLE, SCH. 40
67	1	2" MNPT X 3" FNPT RELIEF VALVE, SET @ 70 PSIG
68	2	6"-150# ANSI RF GASKET, FLEX.
69	18	3/4" X 4" LONG B-7 STUDS W/NUTS
70	2	6"-150# RF FLANGED X GROOVED ADAPTER, IPC
71	2	6" QUICK-VIC 107 VICTAULIC COUPLING W/ENDSEAL GASKET
72	1	6" X 3" NO. 50 VICTAULIC REDUCER, IPC
73	2	4" SERIES 721 VICTAULIC BALL VALVE, 316SS. TRIM
74	1	4" X 4" NO. 20 VICTAULIC TEE, IPC
75	1	6" X 4" NO. 50 VICTAULIC REDUCER, IPC
76	2	3" X 3" X 2" NO. 25 VICTAULIC REDUCING TEE, IPC
77	1	3" FNPT GAS BACK PRESSURE VALVE
78	1	4" X 4" NO. 20 VICTAULIC TEE, IPC
79	1	3"-150# ANSI RF TREATER WATER DUMP VALVE
80	1	3"-150# ANSI RF TREATER OIL DUMP VALVE
81	1	2" GROOVED X 1" MNPT SWAGE
82	3	1" FNPT BALL VALVE, 2000# WDG, 316SS.
83	7	1" X 4" LONG NPT NIPPLE, SCH. 40
84	1	1" X 1" NPT TEE, 2000#
85	5	1" X 90' NPT ELL, 2000#
86	3	1" NPT HEX UNION, 2000#
87	1	1" SCH. 40 STEEL PIPE, TAG
88	1	1" X 1/2" NPT REDUCING BUSHING
89	1	1/2" X 4" LONG NPT NIPPLE, SCH. 40
90	1	1/2" FNPT BALL VALVE, 2000#, 316SS.
91	1	FUEL GAS SCRUBBER BY TREATER MANUFACTURER
92		4" NUPR POLY PIPE

14	3	3" X 7 1/2" LONG GROOVED END NIPPLE, IPC
15	21	3" X 90' NO. 10 VICTAULIC ELL, IPC
16	6	4" X 3" NO. 50 VICTAULIC REDUCER, IPC
17	3	4"-150# ANSI RF GASKET, FLEX.
18	3	5/8" X 3 1/2" LONG B-7 STUDS W/NUTS
19	3	4"-150# ANSI RF THREADED FLANGE, IPC

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	REVISION DESCRIPTION

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APACHE  
SOUTHEAST LUSK  
34 FEDERAL NO. 1-H BATTERY  
EDDY COUNTY, NEW MEXICO

ADDITION OF WELLS 1, 2, 3, & 5 .  
EAST END PIPING PLAN .  
DRAWN BY: p.j.b.  
DATE: 10/2/13  
CHECKED BY:  
DRAWING NO. 13-119-02





## DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

## DISTRICT II

1301 W. Grand Avenue, Artesia, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102

Revised July 18, 2010

Submit one copy to appropriate  
District Office

## OIL CONSERVATION DIVISION

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-40797	Pool Code 41460	Pool Name LUSK; BONE SPRING, SOUTH
Property Code 39355	Property Name LUSK "34" FEDERAL	Well Number 1H
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3561'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	34	19 S	32 E		490	NORTH	360	WEST	LEA

## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 1	34	19 S	32 E		490	N SOUTH	673	WEST	LEA
Dedicated Acres 159.46	Joint or Infill	Consolidation Code	Order No. 693						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p><b>SURFACE LOCATION</b> Lat - N 32°37'21.96" Long - W 103°45'41.09" NMSPC - N 590767.2 E 717417.9 (NAD-83)</p> <p><b>BOTTOM HOLE LOCATION</b> Lat - N 32°36'37.61" Long - W 103°45'37.48" NMSPC - N 586286.6 E 717750.9 (NAD-83)</p>	<p><b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <u>Fatima Vasquez</u> Date: <u>05/03/13</u> Printed Name: <u>Fatima Vasquez</u> Email Address: <u>Fatima.Vasquez@apachecorp.com</u></p> <p><b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this 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 belief.</p> <p>Date Surveyed: <u>05/03/13</u> Signature &amp; Seal of Professional Surveyor: <u>[Signature]</u> Certificate No. Gary L. Jones 7977 BASIN SURVEYS 24236</p>
--	---	--

JUN 19 2013



DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised July 16, 2010

Submit one copy to appropriate  
District Office

OIL CONSERVATION DIVISION HOBBS OGD  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

MAY 10 2013

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-40693	Pool Code 41460	Pool Name LUSK; BONE SPRING, SOUTH
Property Code 39355	Property Name LUSK "34" FEDERAL	Well Number 2H
GRID No. 873	Operator Name APACHE CORPORATION	Elevation 3569'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	34	19 S	32 E		330	NORTH	1715	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No. LOT 2	Section 34	Township 19 S	Range 32 E	Lot Idn	Feet from the 4925 327	North/South line N SOUTH	Feet from the 1989 1979	East/West line WEST	County LEA
Dedicated Acres 159.43	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature <u>Fatima Vasquez</u> Date <u>05/03/13</u></p> <p>Printed Name <u>Fatima Vasquez</u></p> <p>Email Address <u>Fatima.Vasquez@apachecorp.com</u></p>	
<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this 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 belief.</p> <p>Date Surveyed <u>MARCH 2013</u></p> <p>Signature &amp; Seal of Professional Surveyor <u>GARY L. JONES</u></p> <p>W.O. No. <u>24237</u></p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS 24237</p>					

JUN 11 2013

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
**District II**  
1301 W. Grand Avenue, Artesia, NM 88210  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

*SE Lusk atoka  
E Lusk Morrow*  
Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-025-36439	<sup>2</sup> Pool Code 41460	<sup>3</sup> Pool Name Lusk; Bone Spring, South
<sup>4</sup> Property Code 308904	<sup>5</sup> Property Name Southeast Lusk 34 Federal	<sup>6</sup> Well Number 001
<sup>7</sup> OGRID No. 873	<sup>8</sup> Operator Name Apache Corporation: 303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705	<sup>9</sup> Elevation 3357' GL

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	34	19S	32E		1530	North	40	West	Lea

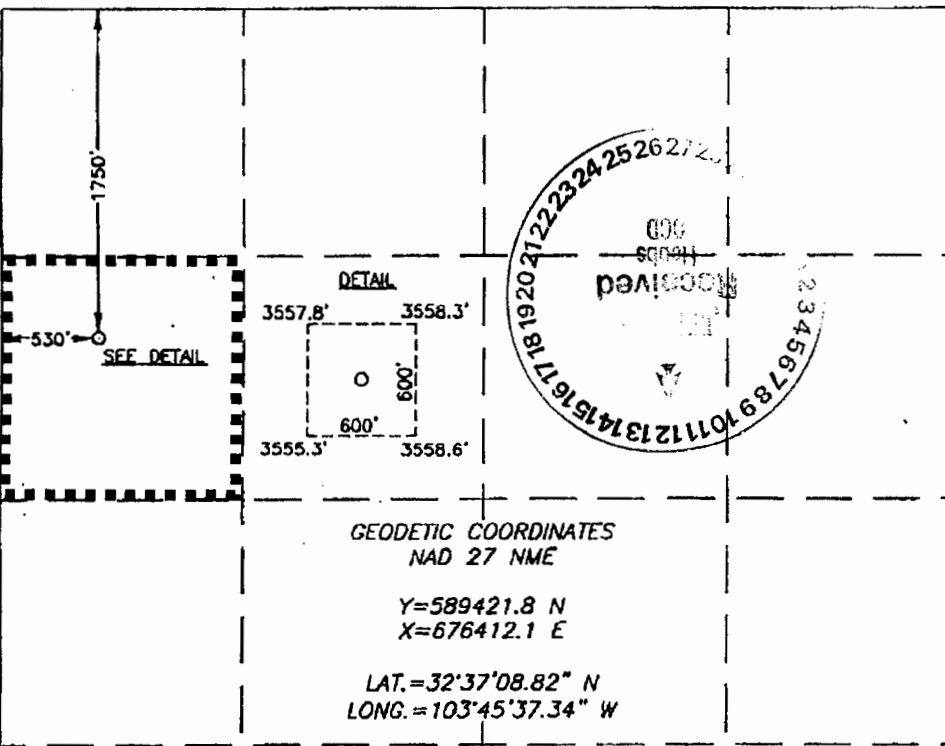
<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	34	19S	32E		1506	North	721	West	Lea

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No. *Pending RC NOI
-------------------------------------	-------------------------------	----------------------------------	--

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	<p><sup>17</sup> <b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Reesa Fisher</i> 10/03/2013 Signature Date Reesa Holland Fisher Printed Name</p>		
	<p><sup>18</sup> <b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this 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 belief.</p> <p>Date of Survey Signature and Seal of Professional Surveyor:</p>		
	<p>Certificate Number</p>		

 <p style="text-align: center;"> <b>DETAILED</b>          3557.8' 3558.3'          600'          3555.3' 3558.6'          1750'          530'          SEE DETAIL          GEODETIC COORDINATES          NAD 27 NME          Y=589421.8 N          X=676412.1 E          LAT.=32°37'08.82" N          LONG.=103°45'37.34" W       </p>				<p style="text-align: center;"> <b>OPERATOR CERTIFICATION</b>          I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.    <i>Tom L. Powell</i>          Signature          Tom L. Powell          Printed Name          Petroleum Engineer          Title          June 7, 2006          Date       </p>	
<p style="text-align: center;"> <b>SURVEYOR CERTIFICATION</b>          I hereby certify that the well location shown on this 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 belief.            MARCH 16, 2005          Date Surveyed          DEL          Signature          Professional Surveyor          NEW MEXICO          05.11.0457          Certified Professional Surveyor 12641       </p>				<p style="text-align: center;">         LOT 1          39.46 AC            LOT 2          39.43 AC            LOT 3          39.39 AC            LOT 4          39.36 AC       </p>	

1625 K. FRENCH DR., MORGES, NM 86340

State of New Mexico  
Energy, Minerals and Natural Resources Department

## DISTRICT II

1301 W. GRAND AVENUE, ARTERIA, NM 88218

## OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102

Revised JUNE 10, 2003

**Submit to Appropriate District Office**

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### DISTRICT III

1000 Rio Brasos Rd., Aztec, NM 87410

**DISTRICT IV**

1230 S. ST. FRANCIS DR., SANTA FE, NM 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37357		Pool Code 41520	Pool Name East Lusk Delaware	
Property Code 300257	Property Name LUSK 34 FEDERAL			Well Number 2
OGRID No. 224400	Operator Name EDGE PETROLEUM OPERATING COMPANY, INC.			Elevation 3558'

### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	34	19-S	32-E		1750	NORTH	530	WEST	LEA

## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code		Order No.					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

**LOT 1**  
39.46 AC

**LOT 2**  
39.43 AC

**LOT 3**  
39.39 AC

**LOT 4**  
39.36 AC

**DETAIL**  
3557.8' 3558.3'  
600' 600'  
3555.3' 3558.6'

**GEODETC COORDINATES**  
NAD 27 NME  
Y=589421.8 N  
X=676412.1 E  
LAT.=32°37'08.82" N  
LONG.=103°45'37.34" W

**OPERATOR CERTIFICATION**  
I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.  
Signature: Tom L. Powell  
Printed Name: Tom L. Powell  
Title: Petroleum Engineer  
Date: June 7, 2006

**SURVEYOR CERTIFICATION**  
I hereby certify that the well location shown on this 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 belief.  
Date Surveyed: MARCH 16, 2005  
Signature: G. EIDSON  
Professional Surveyor  
NEW MEXICO  
05.11.0457  
Certified Professional Surveyor 12641



DISTRICT I  
1625 N. FRANCHIS DR., HOHES, NM 88240

DISTRICT II  
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

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-102  
Revised JUNE 10, 2003  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37358	Pool Code 41520	Pool Name Lusk Delaware, East
Property Code 300 257	Property Name Southeast LUSK 34 FEDERAL	Well Number 3
OGRID No. 224400	Operator Name EDGE PETROLEUM OPERATING COMPANY, INC.	Elevation 3562'

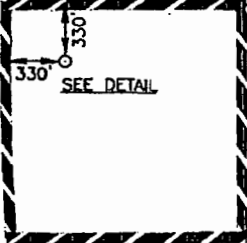
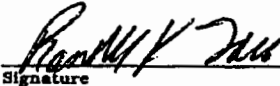

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	34	19-S	32-E		330	NORTH	330	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40		Joint or Infill	Consolidation Code	Order No.					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

 <p>SEE DETAIL</p>	<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=590864.4 N X=676206.1 E</p> <p>LAT.=32°37'23.11" N LONG.=103°45'39.66" W</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p> Signature</p> <p>Randall K. Ford Printed Name</p> <p>Consultant Title</p> <p>March 31, 2005 Date</p>
<p>DETAIL</p> <p>3562.1' 3563.3'</p> <p>600' 600'</p> <p>3560.9' 3562.1'</p>		<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this 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 belief.</p> <p>MARCH 3, 2005</p> <p>Date Surveyed</p> <p>Signature of GARY E. EDSON Professional Surveyor</p> <p> LA</p> <p>Certificate No. GARY E. EDSON 12641</p>

# State of New Mexico

Energy, Minerals and Natural Resources Department

## DISTRICT I

1825 N. FRANKLIN DR., ROSA, NM 88240

## DISTRICT II

1301 W. GRAND AVENUE, ALBUQUERQUE, NM 87210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

## OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102  
Revised JUNE 10, 2003  
Submit to Appropriate District Office  
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## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-025-3740</b>	Pool Code <b>41500 41520</b>	Pool Name <b>Lusk Delaware East</b>
Property Code <b>300257</b>	Property Name <b>SE LUSK 34 FEDERAL</b>	
OGRID No. <b>224400</b>	Operator Name <b>EDGE PETROLEUM OPERATING COMPANY, INC.</b>	Well Number <b>5</b>
		Elevation <b>3561'</b>

### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	34	19-S	32-E		990	NORTH	1650	WEST	LEA

### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
40									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				<h3>OPERATOR CERTIFICATION</h3> <p>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Lindsay Truesdell</i> Signature Lindsay Truesdell Printed Name Consultant Title August 23, 2005 Date</p>	
<h3>SURVEYOR CERTIFICATION</h3> <p>I hereby certify that the well location shown on this 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 belief.</p> <p>JULY 13, 2005</p> <p>Date Surveyed Signature &amp; Seal Professional Surveyor NEW MEXICO JULY 13, 2005 Certification No. GARY HOBSON 12841</p>				<p>LA</p>	
LOT 1	LOT 2	LOT 3	LOT 4		
39.46 AC	39.43 AC	39.39 AC	39.36 AC		

**Brooks, David K., EMNRD**

---

**From:** Brooks, David K., EMNRD  
**Sent:** Friday, November 15, 2013 11:50 AM  
**To:** Reesa.Holland@apachecorp.com  
**Subject:** Apache Corporation - Lusk 34 Fed & SE Lusk 34 wells - Surface Commingling Application

Good morning, Ms. Holland

The referenced application is incomplete because it does not include:

1. A list of all parties (interest owners) owning interests in the production to be commingled, as required by Rule 19.15.12.10.C(4)(b).
2. A statement attesting that the applicant notified each of the interest owners by sending them a copy of the application and attachments and advising them that they must file any objection in writing with the Division's Santa Fe office within 20 days from the date the Division receives the application, as required by Rule 19.15.12.10.C(4)(c).

The letter to interest owners attached to your application, even if it has in fact been sent to all interest owners, does not comply with the second requirement above because it does not contain the admonition about filing of objections within 20 days. This letter asks the interest owners to sign an attached approval. This would be an acceptable alternative, but only if we were furnished with copies of signed approvals from all interest owners.

Furthermore, although you state that the proposed installation will permit separate metering of production from the horizontal wells and the vertical wells, it is not clear whether or not the No. 1H and the No. 2H will be metered separately so as to permit metering allocation of the production from the horizontals between these two wells. Due to their relatively high production, we would require metering allocation between these wells, as well as between the combined horizontal well production stream and the combined vertical well production stream, unless production from the two horizontal wells is identically owned. Well test allocation between the separate vertical wells would be acceptable due to their marginal production.

We will await receipt of your response to the items addressed above.

Sincerely  
David K. Brooks  
Legal Examiner

## Brooks, David K., EMNRD

---

**From:** Hanson, Michelle <Michelle.Hanson@apachecorp.com>  
**Sent:** Thursday, November 21, 2013 6:44 PM  
**To:** Brooks, David K., EMNRD  
**Cc:** Vasquez, Fatima; Emmett, Lucas; Thomas, Mark; Holland, Reesa  
**Subject:** RE: Apache Corporation - Lusk 34 Fed & SE Lusk 34 wells - Surface Commingling Application  
**Attachments:** Affected Interest Owner List.docx; Southeast Lusk 34 Federal\_Consent to Surface Commingle\_Chisos.pdf; Southeast Lusk 34 Federal\_Consent to Surface Commingle\_Cross Border Resources.pdf; RE: Southeast Lusk Section 34-19S-32E, Lea Co., NM - Apache's Surface Commingling Proposal; Letter to OCD\_Lusk 34 Federal #1H & #2H Interest Ownership.pdf

Hi David,

Please see attached list of affected interest owners, as well as a copy of two of the three required Consent letters (missing formal consent letter from Cimarex). Also attached is my latest email correspondence with Cimarex. They have provided their approval to surface comingle; however such approval is subject to a few stipulations which I don't foresee to be an issue. Lastly, attached is a letter regarding the interest ownership between the Lusk 34 Federal #1H and #2H wells. Please let me know if you need anything else from me at this time. Thank you.

*Michelle Hanson*

Landman

**Apache Corporation**

303 Veterans Airpark Lane, Suite 3000

Midland, TX 79705

(432) 818-1093 direct

(432) 818-1190 fax

[michelle.hanson@apachecorp.com](mailto:michelle.hanson@apachecorp.com)

**From:** Holland, Reesa

**Sent:** Monday, November 18, 2013 7:26 AM

**To:** Hanson, Michelle; Emmett, Lucas; Thomas, Mark

**Cc:** Vasquez, Fatima

**Subject:** FW: Apache Corporation - Lusk 34 Fed & SE Lusk 34 wells - Surface Commingling Application

*Reesa Holland Fisher*



Midland, TX

432/818-1062

[Reesa.Holland@apachecorp.com](mailto:Reesa.Holland@apachecorp.com)

---

**From:** Brooks, David K., EMNRD [<mailto:david.brooks@state.nm.us>]

**Sent:** Friday, November 15, 2013 12:50 PM

**To:** Holland, Reesa

**Subject:** Apache Corporation - Lusk 34 Fed & SE Lusk 34 wells - Surface Commingling Application

Good morning, Ms. Holland

The referenced application is incomplete because it does not include:

1. A list of all parties (interest owners) owning interests in the production to be commingled, as required by Rule 19.15.12.10.C(4)(b).
2. A statement attesting that the applicant notified each of the interest owners by sending them a copy of the application and attachments and advising them that they must file any objection in writing with the Division's Santa Fe office within 20 days from the date the Division receives the application, as required by Rule 19.15.12.10.C(4)(c).

The letter to interest owners attached to your application, even if it has in fact been sent to all interest owners, does not comply with the second requirement above because it does not contain the admonition about filing of objections within 20 days. This letter asks the interest owners to sign an attached approval. This would be an acceptable alternative, but only if we were furnished with copies of signed approvals from all interest owners.

Furthermore, although you state that the proposed installation will permit separate metering of production from the horizontal wells and the vertical wells, it is not clear whether or not the No. 1H and the No. 2H will be metered separately so as to permit metering allocation of the production from the horizontals between these two wells. Due to their relatively high production, we would require metering allocation between these wells, as well as between the combined horizontal well production stream and the combined vertical well production stream, unless production from the two horizontal wells is identically owned. Well test allocation between the separate vertical wells would be acceptable due to their marginal production.

We will await receipt of your response to the items addressed above.

Sincerely  
David K. Brooks  
Legal Examiner

**Application to Surface Commingle**

**W/2 Section 34, Township 19 South, Range 32 East, Lea County, New Mexico**

**Wells to be surface commingled:**

Lusk 34 Federal #1H  
Lusk 34 Federal #2H  
SE Lusk 34 Federal #1  
SE Lusk 34 Federal #2  
SE Lusk 34 Federal #3  
SE Lusk 34 Federal #5

**Affected Interest Owners:**

Chisos, Ltd.  
Cross Border Resources  
Cimarex Energy Company



October 7, 2013

Working Interest Owners

RE: **Request for Approval to Surface (Pool) Commingle**  
**Federal Lease Serial No. NMNM01135**  
**Southeast Lusk 34 Federal #1** (possible recompletion to Lusk; Bone Spring, South Pool)  
**Southeast Lusk 34 Federal #2** (Lusk; Delaware, East Pool)  
**Southeast Lusk 34 Federal #3** (Lusk; Delaware, East Pool)  
**Southeast Lusk 34 Federal #5** (Lusk; Delaware, East Pool)  
**Lusk 34 Federal #1H** (Lusk; Bone Spring, South Pool)  
**Lusk 34 Federal #2H** (Lusk; Bone Spring, South Pool)  
Township 19 South, Range 32 East;  
Section 34: W½  
Lea County, New Mexico

Dear Interest Owners,

Apache Corporation ("Apache") hereby requests your approval to surface commingle production from the Southeast Lusk 34 Federal Well Nos. 1 (API No. 30-025-36439), 2 (API No. 30-025-37357), 3 (API No. 30-025-37358) and 5 (API No. 30-025-37680), Lusk 34 Federal Well Nos. 1H (API No. 30-025-40797) and 2H (API No. 30-025-40693), all located in the W½ of Section 34, Township 19 South, Range 32 East, Lea County, New Mexico. Apache plans to set a 3-phase separator for the vertical wells to flow through prior to commingling production from said wells with the horizontal wells at the Lusk 34 Federal No. 1H Battery, which is located on the referenced lands. This flow plan will allow Apache to meter production from the vertical wells separately from production from the horizontal wells. As for allocating production among the vertical wells, Apache requests your approval to allocate using monthly well tests (See attached Addition of Wells 1, 2, 3, & 5 Piping Plan and Details).

Please be aware that the working interest ownership is not identical among the wells and, therefore, in order to commingle production from each well at the surface and account for each well's production in the manner proposed above, Apache must first obtain approval from the affected interest owners.

Apache believes that commingling will not decrease the value of production from each well. Additionally, Apache believes commingling will prevent waste and promote conservation by utilizing the same tank battery equipment for each well, thereby reducing the incremental investment capital that would otherwise be needed to build a separate facility for each well containing difference in ownership and, as a result, will extend the economic life of the wells and leases.

Please evidence your approval of Apache's proposal by executing Page 2 and returning one (1) copy to my attention using the enclosed prepaid envelope provided for your convenience. Should you have any questions, please do not hesitate to contact me at (432) 818-1093.

Sincerely,  
APACHE CORPORATION

Michelle Hanson  
Landman  
(432) 818-1190 fax  
[Michelle.hanson@apachecorp.com](mailto:Michelle.hanson@apachecorp.com)

**Page 2 - Request for Approval to Surface (Pool) Commingle**  
**Southeast Lusk 34 Federal Well Nos. 1, 2, 3 and 5**  
**Lusk 34 Federal Well Nos. 1H and 2H**  
**October 7, 2013**

The undersigned hereby approves to surface commingle production from the Southeast Lusk 34 Federal Well Nos. 1, 2, 3 and 5 and Lusk 34 Federal Well Nos. 1H and 2H and further approves to account for each well's production in the manner set forth in this letter. This approval is subject to final approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Company: Oilco, LLC

By: Sue Ann Craddock

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Sue Ann Craddock  
President

10/14/2013





October 7, 2013

Working Interest Owners

RE: **Request for Approval to Surface (Pool) Commingle**  
**Federal Lease Serial No. NMNM01135**  
**Southeast Lusk 34 Federal #1** (possible recompletion to Lusk; Bone Spring, South Pool)  
**Southeast Lusk 34 Federal #2** (Lusk; Delaware, East Pool)  
**Southeast Lusk 34 Federal #3** (Lusk; Delaware, East Pool)  
**Southeast Lusk 34 Federal #5** (Lusk; Delaware, East Pool)  
**Lusk 34 Federal #1H** (Lusk; Bone Spring, South Pool)  
**Lusk 34 Federal #2H** (Lusk; Bone Spring, South Pool)  
Township 19 South, Range 32 East;  
Section 34: W½  
Lea County, New Mexico

Dear Interest Owners,

Apache Corporation ("Apache") hereby requests your approval to surface commingle production from the Southeast Lusk 34 Federal Well Nos. 1 (API No. 30-025-36439), 2 (API No. 30-025-37357), 3 (API No. 30-025-37358) and 5 (API No. 30-025-37680), Lusk 34 Federal Well Nos. 1H (API No. 30-025-40797) and 2H (API No. 30-025-40693), all located in the W½ of Section 34, Township 19 South, Range 32 East, Lea County, New Mexico. Apache plans to set a 3-phase separator for the vertical wells to flow through prior to commingling production from said wells with the horizontal wells at the Lusk 34 Federal No. 1H Battery, which is located on the referenced lands. This flow plan will allow Apache to meter production from the vertical wells separately from production from the horizontal wells. As for allocating production among the vertical wells, Apache requests your approval to allocate using monthly well tests (See attached Addition of Wells 1, 2, 3, & 5 Piping Plan and Details).

Please be aware that the working interest ownership is not identical among the wells and, therefore, in order to commingle production from each well at the surface and account for each well's production in the manner proposed above, Apache must first obtain approval from the affected interest owners.

Apache believes that commingling will not decrease the value of production from each well. Additionally, Apache believes commingling will prevent waste and promote conservation by utilizing the same tank battery equipment for each well, thereby reducing the incremental investment capital that would otherwise be needed to build a separate facility for each well containing difference in ownership and, as a result, will extend the economic life of the wells and leases.

Please evidence your approval of Apache's proposal by executing Page 2 and returning one (1) copy to my attention using the enclosed prepaid envelope provided for your convenience. Should you have any questions, please do not hesitate to contact me at (432) 818-1093.

Sincerely,  
APACHE CORPORATION

Michelle Hanson  
Landman  
(432) 818-1190 fax  
[Michelle.hanson@apachecorp.com](mailto:Michelle.hanson@apachecorp.com)

Page 2 - Request for Approval to Surface (Pool) Commingle  
Southeast Lusk 34 Federal Well Nos. 1, 2, 3 and 5  
Lusk 34 Federal Well Nos. 1H and 2H  
October 7, 2013

The undersigned hereby approves to surface commingle production from the Southeast Lusk 34 Federal Well Nos. 1, 2, 3 and 5 and Lusk 34 Federal Well Nos. 1H and 2H and further approves to account for each well's production in the manner set forth in this letter. This approval is subject to final approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Company: CROSS BORDERS RESOURCES  
By: [Signature]  
Title: Interim President  
Date: 8 NOV 2013



November 21, 2013

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

RE: Interest Ownership  
Lusk 34 Federal #1H and #2H Wells  
Township 19 South, Range 32 East; N.M.P.M.:  
Section 34; W/2  
Lea County, New Mexico

To Whom It May Concern:

All royalty and overriding royalty interests are identical between the Lusk 34 Federal #1H and #2H wells, which are located on the referenced lands. Further, the working interest ownership is common between the wells except that the proration unit for the Lusk 34 Federal #1H well contains a total of 159.46 acres and the proration unit for the Lusk 34 Federal #2H well contains a total of 159.43. Due to this very slight difference in proration unit size, the working interest ownership was blended so that the working interest owners would own identical gross working interests in both of the aforementioned wells. Therefore, the only ownership difference that remains between the two wells is the net working interest because revenues are paid on a proration unit basis. The working interest owners are fully aware of this slight difference in net working interest and have not objected to the commingling of production or allocation by well test between the two wells.

Should you have any questions, please contact the undersigned at (432) 818-1093.

Sincerely,  
APACHE CORPORATION

A handwritten signature in black ink, appearing to read "Michelle Hanson", is written over the printed name.

Michelle Hanson  
(432) 818-1190 Fax  
[michelle.hanson@apachecorp.com](mailto:michelle.hanson@apachecorp.com)