OCD-HOBBS
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MAR 20 2012
RECEIVED

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No 1004-0137
Expires: July 31, 2010

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.

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

5. Lease Serial No: NMNM111963

6. If Indian, Allottee or Tribe Name

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

1. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other

8. Well Name and No.: SOUTH LUSK 28 FEDERAL #001

2. Name of Operator: APACHE CORPORATION

9. API Well No.: 30 025 36992

3a. Address: 303 VETERANS AIRPARK LANE, STE. 3000, MIDLAND, TX 79705

3b. Phone No. *(include area code)*: 432 818 1906

10. Field and Pool or Exploratory Area: LUSK; BONE SPRING, SOUTH

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*: SEC 28 T19S R32E 660 FSL & 830 FWL

11. Country or Parish, State: LEA CO., NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other COMPLETION
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☑ Plug Back	☐ 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 recomplete 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 recompletion 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 CORPORATION PROPOSES TO WORKOVER THIS WELLBORE BY PLUGGING BACK THE MORROW THEN RECOMPLETING TO THE BONE SPRINGS AND RETURNING THE WELL TO PRODUCTION USING THE ATTACHED PROCEDURE.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

14 I hereby certify that the foregoing is true and correct Name *(Printed/Typed)*: BEV HATFIELD

Title: SR STAFF REGULATORY TECH

Signature: Bev Hatfield

Date: 12/21/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by: PETROLEUM ENGINEER

Title

Date

APPROVED
MAR 9 2012
/s/ [signature]
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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)

APR 04 2012

APACHE CORPORATION

11/3/2011

SOUTH LUSK 28 FED #1

COMPLETION PROCEDURE

Casing: 4-1/2", 11.6 lb/ft, N-80 **Tubing:**
ID = 4.000"
Drift = 3.875"
Capacity = 0.0155 BBL/ft
Burst = 7780 psi; 80% = 6224 psi

KB = 28 ft (AGL) PBTD = 12,710' KB TD = 12,850' KB

1. Spot 500 BBL wtr tanks & BOP onto location. Load all 500 BBL tanks with W/fresh wtr to be used for stimulation work. Set an extra tank onto location for a test flow back tank following fracturing.
2. MIRU DDPU. RU BOP. PU & TIH W/3-7/8" bit, bit sub and tag CIBP @ 12,710'. POOH.
3. Plug back Morrow perfs 12,462 – 12,680' with CIBP with cmt cap if necessary per BLM guidelines. Load & pressure test casing to 3000 psi for 2 min with 2% Kcl.
4. MIRU wireline. Run CNL-GR-CCL log PBTD to surface. Correlate to the GR on Halliburton Spectral Density Dual Spaced Neutron dated 2/1/06. POOH. **(Have copies of this log sent to the attention of Mark Thomas in the Midland office immediately after running.)**
5. Perforate the 2nd Bone Spring zone @ 9144, 50, 75, 9226, 32, 39, 47, 93, 97, 9305, 12, 20, 34, 39, 55, 65, 73, 88, 9400, 10, 43, 60, 68, 91, 9500, 04, 90 & 94' (1JSPF - 28 holes) using a charge that generates a .37" - .42" diameter hole with a minimum 21" penetration. Utilize the CNL-GR-CCL Log from step 4 to correlate depths. RD WL.
6. TIH with 2 3/8" tubing w/SN & PKR. Spot acid across perfs. PU & set PKR @ +/-9050'. Test backside to 1000 psi.
7. Acidize down tbg W/ 5,000 gals of 15% NEFE HCl W/additives using 40 ball sealers to divert evenly spaced throughout job at max rate but not exceeding 5000 psi surface pressure. Rlse PKR & knock balls off perfs. If time allows, reset PKR @ +/-9050' & swab perfs to cleanup. TOH W/tbg & PKR.
8. MIRU frac services. Frac the 2nd Bone Spring dn csg according to vendor recommended procedure.
9. Flow back well until dead. RU reverse unit & swivel.
10. TIH W/3-7/8" bit. Check for fill and CO well if necessary. Reverse circ clean. TOH.
11. TIH W/SN & pkr. Set @ +/-9050'. RU swab equip. Swab to cleanup well, attempt to recover load, & test zone.
12. RD swab equip. TOH.
13. Hydrotest in hole with W/tbg for production as specified by the Artesia office. TIH W/pump & rods as specified by the Artesia office. Production Test for 6 weeks.

14. POOH w/Production Equipment. Run RBP TO 5500' and test to 4000 psi.

15. Perforate the Brushy Canyon zone @ 5245-75 & 5380-5425' (1 JSPF) using a charge that generates a .37" - .42" diameter hole with a minimum 21" penetration. Utilize the CNL-GR-CCL Log from step 4 to correlate depths. RD WL.

16. TIH with 2 3/8" W/SN & PKR. Spot acid across perfs. PU & set PKR @ +/-5150'. Test backside to 1000 psi.

17. Acidize down tbg W/ 5,000 gals of 15% NEFE HCl W/additives using 150 ball sealers to divert evenly spaced throughout job at max rate but not exceeding 5000 psi surface pressure. Rlse PKR & knock balls off perfs. If time allows, reset PKR @ +/-5150' & swab perfs to cleanup. TOH W/tbg & PKR.

18. MIRU frac services. Frac the Brushy Canyon dn csg according to vendor recommended procedure.

19. Flow back well until dead. TIH w/2 3/8" SN. Check for fill on RBP and clean out. If no fill over perfs, TOH. TIH W/PKR & swab test Brushy Canyon. Evaluate production capability.

20. Retrieve RBP & TOH.

21. Hydrotest in hole with W/tbg for production as specified by the Artesia office. TIH W/pump & rods as specified by the Artesia office. Production Test.

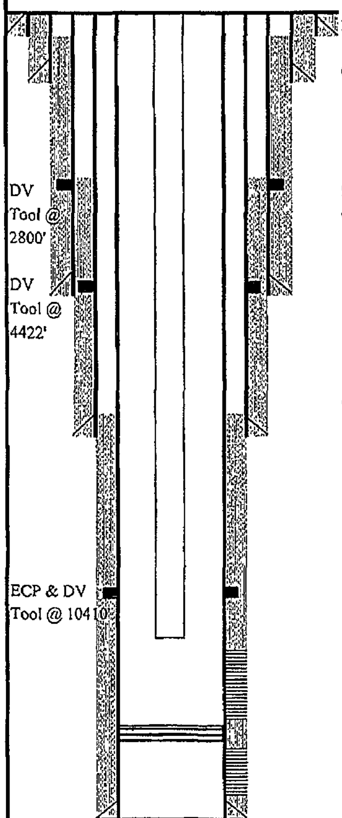
API 30-025-36992

Sec 28 T-19S R32E 660 FSL + 830 FWL

Apache Corp.

GROUP:	**Permian North**	**DATE:**	**Oct. 04, 2011**
FIELD:	**Lusk (Mariner)**	**BY:**	**SNH**
LEASE/UNIT:	**South Lusk 28 Federal**	**WELL:**	**#1**
COUNTY:	**Lea**	**STATE:**	**New Mexico**
API NUMBER:	**30-025-36992**		

KB =
GL = 3557'



30" conductor @ 40' cmt'd to surface
13 3/8" 68# K-55 Set @ 810'
CMT W/ 665 SXS (TOC = SURF)

9 5/8" 47# K-55 Set @ 4470'
CMT W/ 3650 SXS (TOC = 312')

7" 23# NS-110 Set @ 6618'
CMT W/ 1070 SXS (TOC = 2784')

2 3/8" TUBING @ 12398'

MIDDLE MORROW
12462'-12470' (2 JSPF, 16 holes)
12490'-12497' (2 JSPF, 14 holes)
12675'-12680' (2 JSPF, 10 holes)
10/08: CIBP set @ 12710'
LOWER MORROW
12718'-12722' (4 JSPF, 17 holes)

4 1/2" 11.6# N-80 Set @ 12850'
CMT W/ 860 SXS (TOC = 6420' Estimated)

TD = 12850'
PBTD = 12710'

LEASE: South Lusk 28 Federal		Date:	11/04/2011
FIELD: LUSK		Time:	07:53:59
OPER: APA		DBS:	PBDRLG2011
RESR: BONE SPRING 2		Settings:	2011
SORT_CODE:		Scenario:	PRE

KEYWORD & Ref. Code	COMBINED INPUT DATA: Beginning, Ending Rates			Schedule Limit		Method & Value		INITIAL CALCULATED DATA: Ultimate @	End Pt.	Init.Deff	Init. Rate	Final Rate
400 START	11/2011											
401 OIL	75.00	X	B/D	12.00	EXP	B/1.15	67.00	36.876	3/2018	67.0000	2281.	189.
402 "	X	EL	B/D	X	MB	EXP	12.00	53.673	3/2041	12.0000	189.	10.
403 GAS/OIL	1.50	1.50	M/B	TO	LIFE	LOG	TIME		3/2041			
500 PAJ/GAS	-0.18	X	$/M	TO	LIFE	PC	0.00		3/2041		-0.180	-0.180
501 PAJ/OIL	-3.95	X	$/B	TO	LIFE	PC	0.00		3/2041		-3.950	-3.950
502 PAJ/NGL	0.00	X	$/B	TO	LIFE	PC	0.00		3/2041			
505 PRI/OIL	10/10 85.00 85.00 85.00 #								12/2010			
507 "	X 91.07 90.67 88.40 85.15 #								4/2011			
509 "	X 82.60 80.90 80.75 81.60 #								8/2011			
511 "	X 82.73 84.43 85.00 86.70 #								12/2011			
513 "	X 75.00 #/Y								12/2012			
515 "	75.00	X	$/B	TO	LIFE	PC/Y	0.00		3/2041		75.000	75.000
516 PRI/GAS	10/10 4.50 4.50 4.50 #								12/2010			
518 "	X 4.14 4.27 4.42 4.38 #								4/2011			
520 "	X 4.41 4.44 4.50 4.53 #								8/2011			
522 "	X 4.54 4.61 4.76 4.98 #								12/2011			
524 "	X 5.000 5.000 #/Y								12/2013			
526 "	5.00	X	$/M	TO	LIFE	PC/Y	0.00		3/2041		5.000	5.000
527 PRI/NGL	10/10 45.05 45.05 45.05 #								12/2010			
529 "	X 48.230 48.060 46.850 45.130 #								4/2011			
531 "	X 43.780 42.880 42.800 43.250 #								8/2011			
533 "	X 43.620 44.750 45.050 45.950 #								12/2011			
535 "	X 39.75 #/Y								12/2012			
537 "	39.75	X	$/B	TO	LIFE	PC/Y	0.00		3/2041		39.750	39.750
538 PAJ/GAS	-0.50	X	$/M	01/2012	AD	PC	0.00		3/2041		-0.500	-0.180
540 "	-0.50	X	$/M	01/2013	AD	PC	0.00		3/2041		-0.500	-0.180
542 "	-0.50	X	$/M	01/2014	AD	PC	0.00		3/2041		-0.500	-0.180
544 "	-0.50	X	$/M	TO	LIFE	PC	0.00		3/2041		-0.500	-0.180
600 ATX	2.50	X	%	TO	LIFE	PC	0.00		3/2041		0.025	0.025
601 OPC/W	1500.00	X	$/M	TO	LIFE	ESC	COST		3/2041		1500.000	1500.000
602 ATX	0.00	X	%	01/2013	AD	PC	0.00		3/2041			0.025
604 STX/OIL	8.29	X	%	TO	LIFE	PC	0.00		3/2041		0.083	0.083
606 STX/GAS	9.14	X	%	TO	LIFE	PC	0.00		3/2041		0.091	0.091
608 STX/NGL	9.14	X	%	TO	LIFE	PC	0.00		3/2041		0.091	0.091
610 STX/SGS	0.00	X	$/M	TO	LIFE	PC	0.00		3/2041			
705 LSE/WI	50.0000	D	%	TO	LIFE	FLAT	0.00		3/2041		0.500	0.500
720 NET/OIL	37.5000	D	%	TO	LIFE	FLAT	0.00		3/2041		0.375	0.375
740 NET/GAS	37.5000	D	%	TO	LIFE	FLAT	0.00		3/2041		0.375	0.375

OVERLAYS	Beginning, Ending Rates	Schedule Limit	Method & Value	Ultimate @ End Pt.	Init.Deff	Init. Rate	Final Rate

```
900 S  277  S/277      X   FRAC     TO      LIFE     MUL     146.00             3/2041
901 S /274  S/274      X   FRAC     TO      LIFE     MUL     145.00             3/2041
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INVESTMENTS	Tangible	Intang	Units	Invest. Point		Method & Value		Total T&I	Month	Risk Inv.	Tot. T&I&R	Esc. T&I&R
800 COMPL	412.55	345.95	M$G	0.00	MOS	PC	0.00	758.500	11/2011	0	758.5	758.5
801 COMPL	0.00	135.00	M$G	0.00	MOS	PC	0.00	135.000	11/2011	0	135.0	135.0

MISCELLANEOUS DATA PARAMETERS

```
201 P(S)        100.00
202 BTU           1.00
203 SHRINK        0.64
250 LOSS     NO
```

PROJECT RUN SETTINGS

```
Base Date   : 01/1993  Time Frames :  12,81*12
P.W. Date   : 01/2011  Primary PW% :  12.0        Discount Freq.  :  MO
Report Date : 01/2011
Qualifiers  :    Prod = PRE           Price = PLAN         Cost   = PRE        Owner   = APA
                Title = DEFAULT       Misc  = PRE          Invest = PRE        Overlay = DEFAULT
```

LEASE: South Lusk 28 Federal
FIELD: LUSK
OPER: APA
RESR: BONE SPRING 2
S_E

DATE : 11/04/2011
TIME : 07:53:59
DBS : PBDRLG2011
SETTINGS : 2011
SCENARIO : PRE

RESERVES AND ECONOMICS

AS OF DATE: 01/2011

--END-- MO-YEAR	WELL COUNT	-GROSS PRODUCTION- OIL ---(MB)---	GAS --(MMCF)--	NGL ---(MB)---	-NET PRODUCTION- OIL ---(MB)---	GAS --(MMCF)--	NGL ---(MB)---	-----SALES INCOME----- OIL ---(M$)---	GAS ---(M$)---	NGL ---(M$)---	TOTAL ---(M$)---
12-2011	1.	3.885	3.730	0.000	1.457	1.399	0.000	119.232	5.849	0.000	125.081
12-2012	1.	12.273	11.782	0.000	4.602	4.418	0.000	327.002	19.087	0.000	346.089
12-2013	1.	6.529	6.268	0.000	2.448	2.351	0.000	173.966	10.154	0.000	184.120
12-2014	1.	4.583	4.400	0.000	1.719	1.650	0.000	122.105	7.127	0.000	129.232
12-2015	1.	3.571	3.428	0.000	1.339	1.286	0.000	95.146	5.554	0.000	100.700
12-2016	1.	2.944	2.826	0.000	1.104	1.060	0.000	78.432	4.578	0.000	83.010
12-2017	1.	2.514	2.413	0.000	0.943	0.905	0.000	66.983	3.910	0.000	70.893
12-2018	1.	2.197	2.109	0.000	0.824	0.791	0.000	58.546	3.417	0.000	61.964
12-2019	1.	1.934	1.856	0.000	0.725	0.696	0.000	51.518	3.007	0.000	54.525
12-2020	1.	1.702	1.633	0.000	0.638	0.613	0.000	45.336	2.646	0.000	47.982
12-2021	1.	1.497	1.437	0.000	0.562	0.539	0.000	39.896	2.329	0.000	42.224
12-2022	1.	1.318	1.265	0.000	0.494	0.474	0.000	35.108	2.049	0.000	37.157
AFTER	1.	6.855	6.581	0.000	2.571	2.468	0.000	182.635	10.660	0.000	193.296
TOTAL	1.	51.802	49.730	0.000	19.426	18.649	0.000	1395.906	80.368	0.000	1476.274

--END-- MO-YEAR	-- NET PRICE -- OIL $/BBL	GAS $/MCF	NGL $/BBL	- TAXES - SEV -(M$)-	ADVAL -(M$)-	-- EXPENSE -- GTHR FEE -(M$)-	TOT. LOE --(M$)--	NET OPER INCOME ----(M$)----	CAPITAL INVESTMENT ----(M$)----	ANNUAL FNR ---(M$)---	DISC. FNR @ 12% ---(M$)---	CUM. DISC. FNR @12% ---(M$)---
12-2011	81.83	4.181	0.00	10.	3.	0.	1.500	110.295	446.750	-336.455	-307.045	-307.045
12-2012	71.05	4.320	0.00	29.	8.	0.	9.000	300.305	0.000	300.305	255.655	-51.389
12-2013	71.05	4.320	0.00	15.	4.	0.	9.000	155.551	0.000	155.551	117.736	66.347
12-2014	71.05	4.320	0.00	11.	3.	0.	9.000	106.497	0.000	106.497	71.874	138.221
12-2015	71.05	4.320	0.00	8.	2.	0.	9.000	80.997	0.000	80.997	48.774	186.995
12-2016	71.05	4.320	0.00	7.	2.	0.	9.000	65.187	0.000	65.187	35.034	222.030
12-2017	71.05	4.320	0.00	6.	2.	0.	9.000	54.358	0.000	54.358	26.077	248.107
12-2018	71.05	4.320	0.00	5.	1.	0.	9.000	46.378	0.000	46.378	19.862	267.969
12-2019	71.05	4.320	0.00	5.	1.	0.	9.000	39.730	0.000	39.730	15.193	283.162
12-2020	71.05	4.320	0.00	4.	1.	0.	9.000	33.882	0.000	33.882	11.569	294.731
12-2021	71.05	4.320	0.00	4.	1.	0.	9.000	28.736	0.000	28.736	8.761	303.492
12-2022	71.05	4.320	0.00	3.	1.	0.	9.000	24.208	0.000	24.208	6.590	310.082
AFTER	71.05	4.320	0.00	16.	4.	0.	87.000	85.751	0.000	85.751	16.345	326.427
TOTAL	71.86	4.310	0.00	123.	34.	0.	187.500	1131.877	446.750	685.127	326.427	326.427

	OIL	GAS
GROSS WELLS	1.0	0.0
GROSS RES., MB & MMF	51.802	49.730
WI RES., MB & MMF	25.901	24.865
NET RES., MB & MMF	19.426	18.649
NET EQV., MBOE/MMCFE	22.534	135.203
NET REVENUE, M$	1395.906	80.368
INITIAL PRICE, $	81.050	4.080
INITIAL N.I., PCT.	37.500	37.500
FDC ($/BOE)	19.826	

LIFE, YRS.	21.67
DISCOUNT %	12.00
UNDISCOUNTED PAYOUT, YRS.	2.23
DISCOUNTED PAYOUT, YRS.	2.44
UNDISCOUNTED NET/INVEST.	2.53
DISCOUNTED NET/INVEST.	1.80
RATE-OF-RETURN, PCT.	68.77
INITIAL W.I., PCT.	50.000

P.W. %	P.W., M$
10.00	365.158
11.00	345.107
12.00	326.427
13.00	308.991
15.00	277.417
20.00	213.757
40.00	75.903
60.00	15.750
90.00	-25.611
500.00	-50.057

LEASE: South Lusk 28 Federal
FIELD: LUSK
OPER: APA
RESR: BONE SPRING 2
S_E

DATE : 11/04/2011
TIME : 07:53:59
DBS : PBDRLG2011
SETTINGS : 2011
SCENARIO : PRE

A F T E R T A X E C O N O M I C S

AS OF DATE: 01/2011

--END-- MO-YEAR -------	WORKING INTEREST --(%)--	REVENUE INTEREST --(%)--	NET OPER INCOME ---(M$)---	INVESTMENT & RISK ---(M$)---	------- DEPRECIATION ----(M$)----	DEDUCTIONS DEPLETION ---(M$)---	------- INTANGIBLES ---(M$)---	TAXABLE INCOME ---(M$)---	TAX CREDIT ---(M$)---	INCOME TAX ---(M$)---
12-2011	50.000	37.500	110.295	446.750	15.471	0.000	240.475	-145.651	0.000	-51.706
12-2012	50.000	37.500	300.305	0.000	48.872	0.000	0.000	251.434	0.000	89.259
12-2013	50.000	37.500	155.551	0.000	26.000	0.000	0.000	129.551	0.000	45.991
12-2014	50.000	37.500	106.497	0.000	18.249	0.000	0.000	88.248	0.000	31.328
12-2015	50.000	37.500	80.997	0.000	14.220	0.000	0.000	66.777	0.000	23.706
12-2016	50.000	37.500	65.187	0.000	11.722	0.000	0.000	53.465	0.000	18.980
12-2017	50.000	37.500	54.358	0.000	10.011	0.000	0.000	44.347	0.000	15.743
12-2018	50.000	37.500	46.378	0.000	8.750	0.000	0.000	37.628	0.000	13.358
12-2019	50.000	37.500	39.730	0.000	7.700	0.000	0.000	32.030	0.000	11.371
12-2020	50.000	37.500	33.082	0.000	6.776	0.000	0.000	27.107	0.000	9.623
12-2021	50.000	37.500	28.736	0.000	5.963	0.000	0.000	22.774	0.000	8.085
12-2022	50.000	37.500	24.208	0.000	5.247	0.000	0.000	18.961	0.000	6.731
AFTER	50.000	37.500	85.751	0.000	27.295	0.000	0.000	58.456	0.000	20.752
TOTAL	50.000	37.500	1131.877	446.750	206.275	0.000	240.475	685.127	0.000	243.220

--END-- MO-YEAR -------	CORP. TAX RATE ---(%)--	-------- ANNUAL ---(M$)---	BFIT FNR CUMULATIVE ---(M$)---	DISC. @12% ----(M$)---	---------- CUM. DISC. ----(M$)---	-------- ANNUAL ---(M$)---	AFIT FNR CUMULATIVE ---(M$)---	DISC. @12% ----(M$)---	---------- CUM. DISC. ---(M$)---
12-2011	35.50	-336.455	-336.455	-307.045	-307.045	-284.749	-284.749	-253.413	-253.413
12-2012	35.50	300.305	-36.150	255.655	-51.389	211.046	-73.702	178.054	-75.359
12-2013	35.50	155.551	119.402	117.736	66.347	109.560	35.858	82.529	7.170
12-2014	35.50	106.497	225.899	71.874	138.221	75.169	111.027	50.556	57.727
12-2015	35.50	80.997	306.896	48.774	186.995	57.291	168.318	34.404	92.130
12-2016	35.50	65.187	372.083	35.034	222.030	46.207	214.525	24.775	116.905
12-2017	35.50	54.358	426.442	26.077	248.107	38.615	253.141	18.486	135.391
12-2018	35.50	46.378	472.819	19.862	267.969	33.020	286.160	14.114	149.505
12-2019	35.50	39.730	512.549	15.193	283.162	28.359	314.520	10.823	160.328
12-2020	35.50	33.882	546.432	11.569	294.731	24.259	338.779	8.266	168.594
12-2021	35.50	28.736	575.168	8.761	303.492	20.652	359.431	6.283	174.877
12-2022	35.50	24.208	599.376	6.590	310.082	17.477	376.908	4.747	179.624
AFTER	35.50	85.751	685.127	16.345	326.427	64.999	441.907	12.189	191.813
TOTAL	35.50	685.127	685.127	326.427	326.427	441.907	441.907	191.813	191.813

	OIL	GAS			P.W. %	P.W., M$
GROSS WELLS	1.0	0.0	LIFE, YRS.	21.67	10.00	218.237
GROSS RES., MB & MMF	51.802	49.730	DISCOUNT %	12.00	11.00	204.534
WI RES., MB & MMF	25.901	24.865	UNDISCOUNTED PAYOUT, YRS.	2.67	12.00	191.813
NET RES., MB & MMF	19.426	18.649	DISCOUNTED PAYOUT, YRS.	2.91	13.00	179.983
NET EQV., MBOE/MMCFE	22.534	135.203	UNDISCOUNTED NET/INVEST.	1.99	15.00	158.673
NET REVENUE, M$	1395.906	80.368	DISCOUNTED NET/INVEST.	1.47	20.00	116.237
INITIAL PRICE, $	81.050	4.080	RATE-OF-RETURN, PCT.	55.03	40.00	28.156
INITIAL N.I., PCT.	37.500	37.500	INITIAL W.I., PCT.	50.000	60.00	-6.976
					90.00	-27.973
					500.00	-18.468

LEASE: South Lusk 28 Federal
FIELD: LUSK
OPER: APA
RESR: BONE SPRING 2
SORT_CODE:

DATE : 11/04/2011
TIME : 07:53:59
DBS : PDDRLG2011
SETTINGS : 2011
SCENARIO : PRE

E C O N O M I C   I N D I C A T O R S

AS OF DATE: 01/2011

PRESENT WORTH PROFILE AND
RATE-OF-RETURN VS. BONUS TABLE

	B.F.I.T. WORTH M$------	A.F.I.T. WORTH M$------	A.F.I.T. BONUS M$------
0.	685.127	441.907	685.127
10.	365.158	218.237	282.927
11.	345.107	204.534	262.556
12.	326.427	191.813	243.997
13.	308.991	179.983	227.032
15.	277.417	158.673	197.164
20.	213.757	116.237	140.201
25.	165.885	84.915	100.183
40.	75.903	28.156	31.849
50.	40.528	7.073	7.863
60.	15.750	-6.976	-7.655
70.	-2.199	-16.594	-18.030
90.	-25.611	-27.973	-29.956
100.	-33.344	-31.251	-33.286
500.	-50.057	-18.468	-18.791
RATE OF RETURN, PCT.	68.8	55.0	
UNDISCOUNTED PAYOUT, YRS.	2.23	2.67	
DISCOUNTED PAYOUT, YRS.	2.44	2.91	
UNDISCOUNTED NET/INVEST.	2.53	1.99	
DISCOUNTED NET/INVEST.	1.80	1.47	

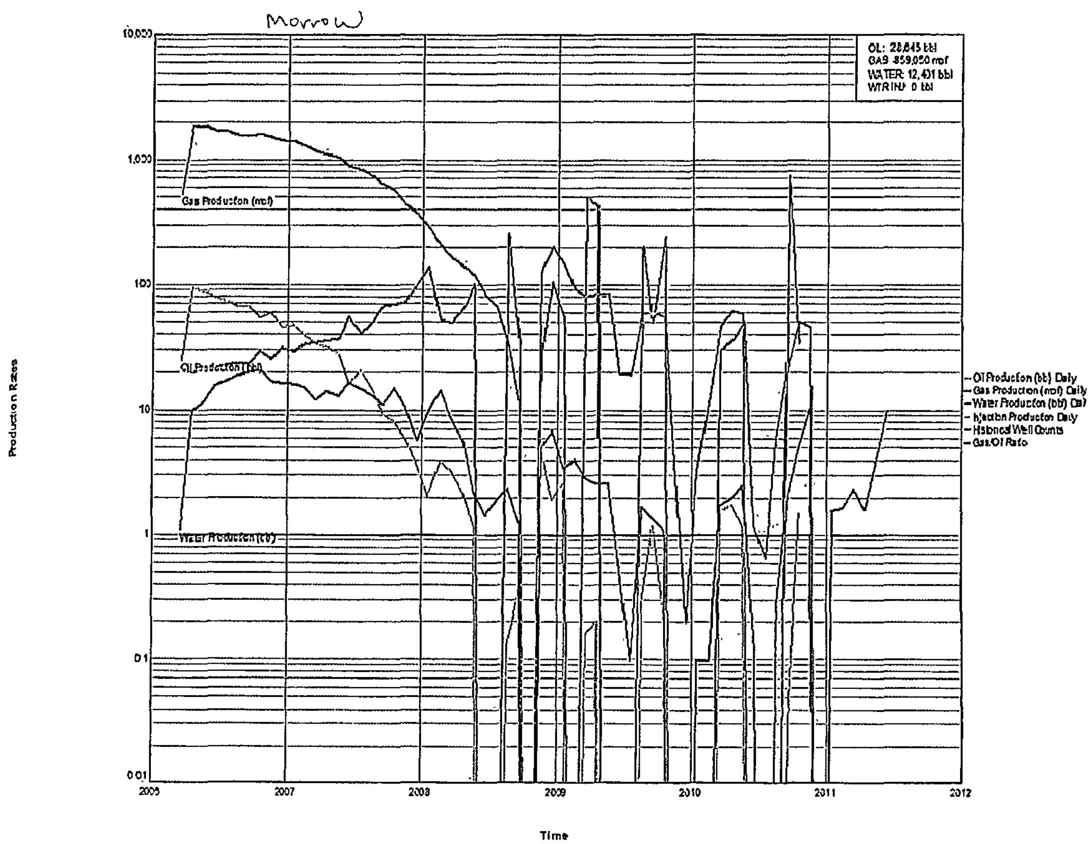
WI: 50.000 DHC:
NRI: 37.500 CWC:
COS: 100. NRWI(M$): 446.750

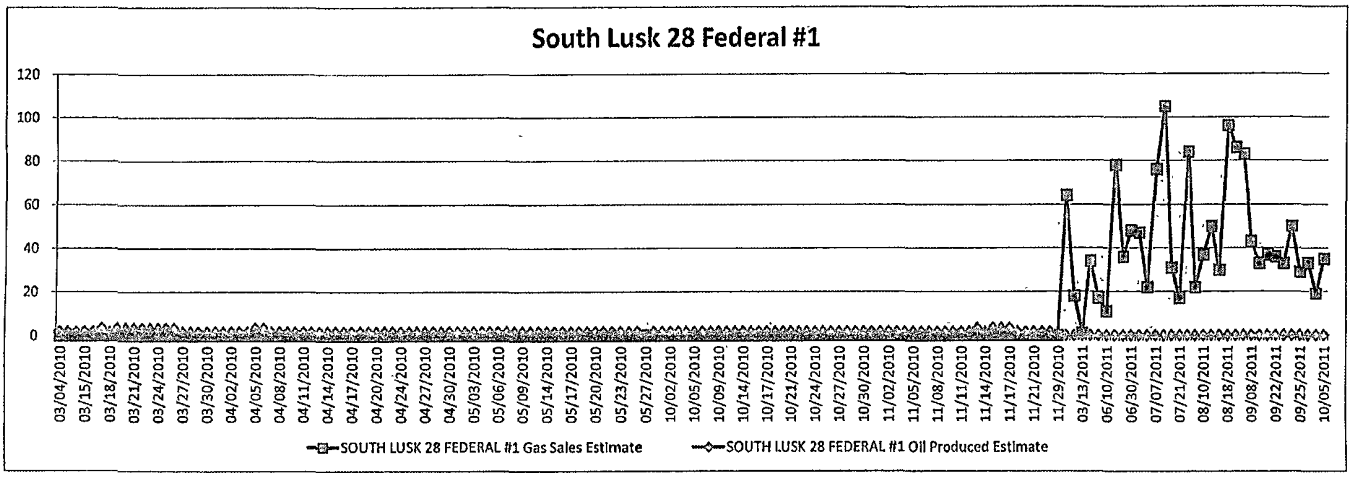
	MMCF	MBO	MNGL	EMMCF
GROSS RES:	77.703	51.802	0.000	388.513
NET RES:	18.649	19.426	0.000	135.203

AFIT PV12(M$): 191.813
AFIT ROR(%): 55.0
F.C. $/NEMCF: 3.304

SOUTH LUSK 28 FEDERAL 1 30025369920000 LUSK MORROW

Morrow




South Lusk 28 Federal #1
120
100
80
60
40
20
0
03/04/2010
03/15/2010
03/18/2010
03/21/2010
03/24/2010
03/27/2010
03/30/2010
04/02/2010
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06/30/2011
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08/10/2011
08/18/2011
09/08/2011
09/22/2011
09/25/2011
10/05/2011
SOUTH LUSK 28 FEDERAL #1 Gas Sales Estimate
SOUTH LUSK 28 FEDERAL #1 Oil Produced Estimate

All KPIs for Property by Month

Measures	PropertyDim Property Number	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	Jun 2011	Jul 2011	Aug 2011	Sep 2011
Gross OIL	32108401											
Gross GAS	32108401		608	47	50	71	48	129	297	411	396	307
Apache OIL	32108401											
Apache OIL/Day	32108401											
Apache GAS	32108401			27	28	41	27	74	170	235	226	179
Apache GAS/Day	32108401			1	1	1	1	2	6	8	7	6
Apache NGLS	32108401											
Apache NGLS/Day	32108401											
Apache Volume BOE/Day	32108401			0	0	0	0	0	1	1	1	1
Oil Sales	32108401											
Gas Sales	32108401			$149	$155	$227	$141	$182	$824	$593	$523	$1,036
NGL Sales	32108401											
Total Revenue	32108401			$149	$155	$227	$141	$182	$824	$593	$523	$1,036
Direct Expense	32108401		$0	$0	$8,438	$3,824	$3,482	$3,390	$376	$2,447	$3,076	$2,559
Direct Expense: $/BOE	32108401		1.#INF	$0.00	$1,808.20	$559.64	$773.77	$274.84	$13.28	$62.48	$102.89	$85.93
Gross Direct Expense	32108401		$0	$0	$9,001	$4,079	$3,714	$3,616	$402	$2,610	$4,134	$2,730
Ad Valorem Tax	32108401		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Prod Severance Tax	32108401			$14	$14	$21	$13	$17	$77	$55	$49	$96
Transportation Cost	32108401											
Workover Expense	32108401		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Operating Expense	32108401		$0	$14	$8,453	$3,845	$3,495	$3,407	$453	$2,502	$3,924	$2,655
Lease Level Income	32108401			$135	($8,298)	($3,618)	($3,354)	($3,225)	$371	($1,909)	($3,401)	($1,619)
Margin	32108401			90.68 %	-5,366.72 %	-1,594.28 %	-2,385.64 %	-1,776.16 %	44.99 %	-321.81 %	-649.94 %	-156.19 %
Realization: OIL	32108401											
Realization: GAS	32108401			$5.52	$5.52	$5.54	$5.21	$2.45	$4.84	$2.52	$2.32	$5.80
Realization: $/NGL	32108401											

South Lusk 28 Fed #1
30-025-36992
Apache Corporation
March 19, 2012
Conditions of Approval

Notify BLM at 575-393-3612 a minimum of 24 hours prior to commencing work.

Work to be completed by September 30, 2012.

1. **Surface disturbance beyond the originally approved pad must have prior approval.**
2. **Closed loop system required.**
3. **Operator to have H2S monitoring equipment on location.**
4. **A minimum of a 3000 (3M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (3M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.**
5. **Steps 1 & 2 – OK**
6. **Step 3 - The following revised sequence is required to permanently plug back the well from the Morrow formation in compliance with BLM guidelines:**
   Step 3a - Review well records to evaluate cement quality behind 4-1/2" casing in the interval of 12710' to top of Bone Springs Formation. (If wellfile data is not adequate, then a CBL must be run to verify cement quality behind casing up to Bone Springs.) If necessary, contact the BLM to discuss appropriate plan for required annular isolation of the Morrow and Wolfcamp formations.
   Step 3b - Verify current PBTD (BLM to witness). Spot mud laden fluid mixed with 25 sx of gel per 100 bbls of water over the interval 12710' (PBTD) up to 12400'.
   Step 3c - Isolate the Morrow perforations by setting the proposed CIBP 50' above the uppermost perforation (12462') in the Morrow Formation. Tag the CIBP.
   Step 3d - Place a ±428' Class H cement plug on the CIBP and across the top Morrow in the interval from 11984' - 12412' (CIBP). Operator has the option set one Class H plug from CIBP to above Wolfcamp.
   Step 3e - Notify BLM to witness the tag depth. Pressure test the casing. Operator could exceed the allowed 70% of burst test pressure if the annulus between the 4.5" and 7" casing is not also full of fluid.

Step 3f – Spot mud laden fluid from 11984' up to 10522'. Place a balanced Class H cement plug across the top Wolfcamp from 10284' - 10522'. This plug will be $\pm$238' in length, or 25 sx, whichever is greater; and will be across the top of the Wolfcamp formation and the DV tool at 10410'. If necessary increase slurry volume. WOC.

Step 3g - Verify the top of plug to establish the new PBTD for production. Notify BLM to witness the tag depth.

Step 4 – OK. (If preferred by Operator, the cased hole logging requirement can be done after step 3d.) Electronic copies of all logs run are to be provided to BLM Petroleum Engineering. PDF format submitted by email is sufficient.

Steps 5 through 18 – Ok.

Step 19 – Operator will need to submit a sundry requesting down hole commingle approval.

Step 20 through 21 - ok

7. **All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of workover operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.**
8. **Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.**
9. **Subsequent sundry required detailing work done and completion report for new zone. Operator to submit a wellbore schematic.**

TMM 031912