

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTN.M. Oil Cons. Division
1625 N. French Dr.
Hobbs, NM 88240BLM APD Form 3160-3
APD No. 10040133
Revised November 20, 2001

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.Case Serial No.
NMNM044216

6. If Indian, allottee or Tribe Name

7. If Unit or Co-Agreement, Name and or No.

8. Well Name and No.
Bluitt SA 13 Federal #59. API Well No.
30-041-2021310. Field and Pool, or Exploratory Area
Bluitt San Andres Assoc11. County or Parish, State
Roosevelt
NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

SAGA PETROLEUM LLC

3a. Address

415 W WALL, SUITE 1900 MIDLAND, TX 79701

3b. Phone No. (include area code)

(915)684-4293

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

1980' FNL & 660' FWL

Sec 13 (E) T8S, R37E

12. CHECK 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
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☒ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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 recompleate horizontally, give subsurface locations 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 shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Clean out to 4650', w/bit & scraper, POOH & LD BHA, PU retainer & GIH to 4590', set, test tbg to 3500 psi, establish inj rate @ 1 BPM @ 400 psi, test csg to 500# - ok. Mix & pump 75 sx Class C w/3% fluid loss, pumped 14.5 bbls below CR, sqzd to 1200#. unsting from CR & circ out excess cmt.
12-4-01 Perf'd 1 JSPF @ 4484', 85', 87', 4500', 01', 02', 11', 14', 31', 32', 52', 53, 4555'. Pump 12 bbls 15% NEFE HCL acid, Frac as follows 5000 gal 30# borate xlink gel pad, 8000 gal 30# borate xlink gel w/1-4 PPG 20/40 sd, 17,470# sd in formation out of 19,425#, AIR 12.2 BPM. ISIP 1250 psi, 10 mins 719 psi. Swabbed. 4 pt test ran 12-27-01 Form enclosed. Had gas meter installed.

ACCEPTED FOR RECORD

FEB 12 2002

ARMANDO LOPEZ
PETROLEUM ENGINEER

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Bonnie Husband

Title

PRODUCTION ANALYST

Signature

Bonnie Husband

Date

01/18/2002

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 these rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, makes 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.

RECEIVED

2012 FEB 11 AM 10:20

U.S. DEPT. OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Rev sed October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator SAGA PETROLEUM				Lease or Unit Name BLUITT SA 13 FEDERAL			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12/27/01		Well No 5	
Completion Date		Total Depth		Plug Back TD		Elevation	
Csg. Size 5 1/2		Wt. 14		Set At		Unit Ltr - Sec - TWP - Rge M 13 8 37	
Tbg. Size 2 3/8		Wt. 1.995		Set At 4443		County ROOSEVELT	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 4443		Formation	
Producing Thru Tbg. Size		Reservoir Temp °F 118.4 @ 4443		Mean Annual Temp °F 60		Baro. Press -P _a 13.2	
L 4443		H 4443		Gg 0.74		%CO ₂ 5.934	
				%N ₂ 6.803		%H ₂ S N/A	
				Prover N/A		Meter Run 4.026	
						Taps FLG	
FLOW DATA				TUBING DATA		CASING DATA	
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp. °F	Press p.s.i.g.	Temp. °F
SI						787	
1	4 X 1.500		66	0.49	104	754	
2	4 X 1.500		81	1	100	517	
3	4 X 1.500		81	0.81	104	354	
4	4 X 1.500		81	1	6	96	
5							
RATE OF FLOW CALCULATIONS							
No.	COEFFICIENT (24 Hour)		$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}
1	10.84		6.23	79.2	0.9602	1.162	1.012
2	10.84		9.71	94.2	9636	1.162	1.012
3	10.84		8.74	94.2	9602	1.162	1.012
4	10.84		9.71	94.2	9671	1.162	1.012
5							
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio DRY GAS Mcf bbl.		
1	0.11	564	1.48	0.976	A.P.I. Gravity of Liquid Hydrocarbons DRY Deg		
2	0.13	560	1.47	0.977	Specific Gravity Separator Gas 0.740 XXXXXXXX		
3	0.13	564	1.48	0.977	Specific Gravity Flowing Fluid XXXXXX		
4	0.13	556	1.46	0.977	Critical Pressure 677 P.S.I.A. P.S.I.A.		
5					Critical Temperature 379 R R		
P _c 800.2 P _{c2} 640.3							
No.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{12.403}{\quad} (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{3.513}{\quad}$		
1		767.3	588.7	51.6			
2		530.4	281.4	359			
3		367.5	135	505.3			
4		252.7	63.9	576.4			
5							
Absolute Open Flow 267				Mcf/d @ 15.025		Angle of Slope (°) 63.5	
						Slope n 0.499	
Remarks NO FLUID PRODUCED * = CORRECTED TO 5.934 % CO2 & 6.803 % N2							
Approved By Division:		Conducted By:		Calculated By:		Checked By:	
		METERING & TESTING		BM		BM	

RECEIVED BY RETROLEUM ENGINEER FEB 15 2002

COMPANY : SAGA PETROLEUM LEASE : BAETZ FED. UNIT WELL NO. : 1305 Pc = 800.2 Pc2 = 640.3 *
 UNIT : M SECTION : 13 TOWNSHIP : 8 *
 L : 4443 E : 4443 L/H : 1 G/GMIX : 0.740 Pt2 = 588.6 Pw = 767.3 *
 %CO2 : 5.934 %N2 : 6.803 H2S : DATE : 12-27-01 281.1 530.4 *
 d : 1.995 Fr : 0.018231 GH : 3287.8 RANGE : 37 134.8 367.5 *
 ----- 63.6 252.7 *

VOL 1 : 76 PSIA 1 : 767.2 RESV.TEMP 118.4 Pc2-Pw2= 51.6 Pw2 = 588.7 *
 VOL 2 : 119 PSIA 2 : 530.2 359.0 281.4 *
 VOL 3 : 106 PSIA 3 : 367.2 SHUT-IN PR= 800.2 505.3 135.0 *
 VOL 4 : 120 PSIA 4 : 252.2 576.4 63.9 *

PCR : 677 n = 0.499 *
 TCR : 379 *

Pc2/(Pc2-Pw2) = 12.403 *
 1.784 *
 1.267 *
 1.111 *

LINE	RATE 1		RATE 2		RATE 3		RATE 4	
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1 QM	0.076	0.076	0.119	0.119	0.106	0.106	0.120	0.120
2 TW	534	534	534	534	534	534	534	534
3 Ts	578.4	578.4	578.4	578.4	578.4	578.4	578.4	578.4
4 T	556.2	556.2	556.2	556.2	556.2	556.2	556.2	556.2
PR (est)	1.13		0.78		0.54		0.37	
5 Z(est)	0.860	0.852	0.894	0.889	0.919	0.916	0.937	0.934
6 TZ	478.1	474.0	497.5	494.6	511.2	509.2	521.0	519.6
7 GH/TZ	6.876	6.937	6.608	6.648	6.431	6.457	6.311	6.327
8 eS	1.294	1.297	1.281	1.283	1.273	1.274	1.267	1.268
9 l-e-S	0.227	0.229	0.219	0.221	0.214	0.215	0.211	0.211
10 Pt	767.2	767.2	530.2	530.2	367.2	367.2	252.2	252.2
11 Pt2 /1000	588.6	588.6	281.1	281.1	134.8	134.8	63.6	63.6
12 Fr	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231
13 Fc=FrTZ	8.717	8.641	9.070	9.017	9.320	9.284	9.499	9.473
14 FcQm	0.66	0.66	1.08	1.07	0.99	0.98	1.14	1.14
15 L/H(FcQm)	0.4	0.4	1.2	1.2	1.0	1.0	1.3	1.3
16 Fw	0.099759	0.098778	0.255720	0.254041	0.209157	0.208242	0.273778	0.2729725
17 Pw2	588.7	588.7	281.4	281.4	135.0	135.0	63.9	63.9
18 Ps2	761.9	763.6	360.5	361.0	171.9	172.0	80.9	81.0
19 Ps	872.8	873.8	600.4	600.9	414.6	414.8	284.5	284.6
20 P	820.0	820.5	565.3	565.5	390.9	391.0	268.3	268.4
21 Pr	1.21	1.21	0.84	0.84	0.58	0.58	0.40	0.40
22 Tr	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47
23 Z	0.852	0.852	0.889	0.889	0.916	0.915	0.934	0.934

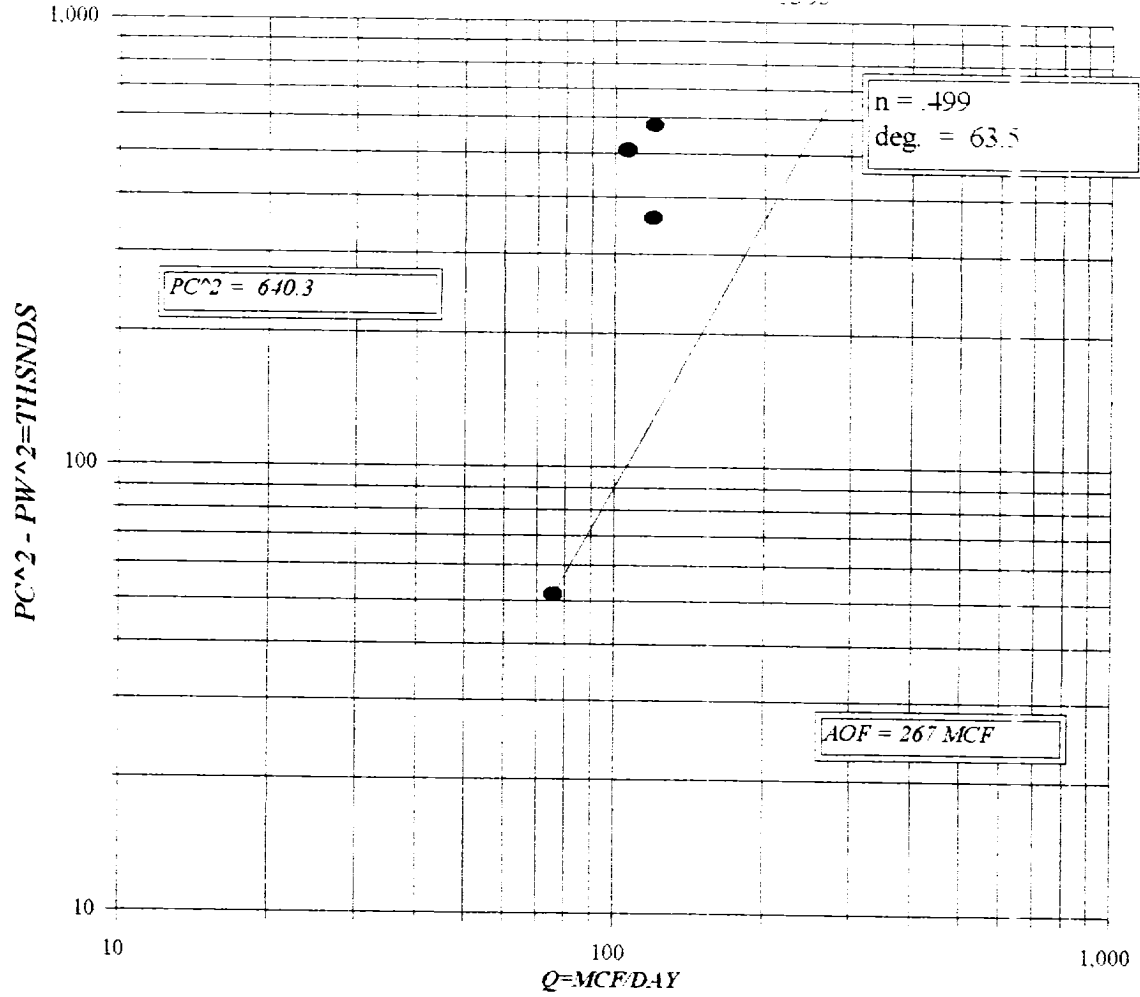
[Pc2/Pc2-Pw2]n = 3.513 *
 1.335 *
 1.125 *
 1.054 *
 AOF= Q 0.267 *
 0.159 *
 0.119 *
 0.126 *

FORM C122-D

RECEIVED
 5/15/20

SAGA PETROLEUM

BLUITT-SA 13 FEDERAL #5



RECEIVED
FEB 21 1970

METERING AND TESTING: DATA SHEET

Phone NO. (505) 397-1631
Fax No. (505) 397-0990

Fax 397-0990

Company Name: Saga
Well No. Bluff SA 13 Federal #5
Test Date: 12-27-01
Formation: ROOSEVELT
County: N.M.
State: N.M.
Test Type: SWL NW 1/4 Sec 13 T8S R37E

Meter Run Size: 4" meter Run - 100 x 1500
Office Meter Range: 12-27-01
Tbg. Size: 12-27-01
Csg Size: 12-27-01
Perfs: ROOSEVELT
Packer Depth: N.M.
TD / Pktd: N.M.

Running Totals:

Oil: _____
Water: _____

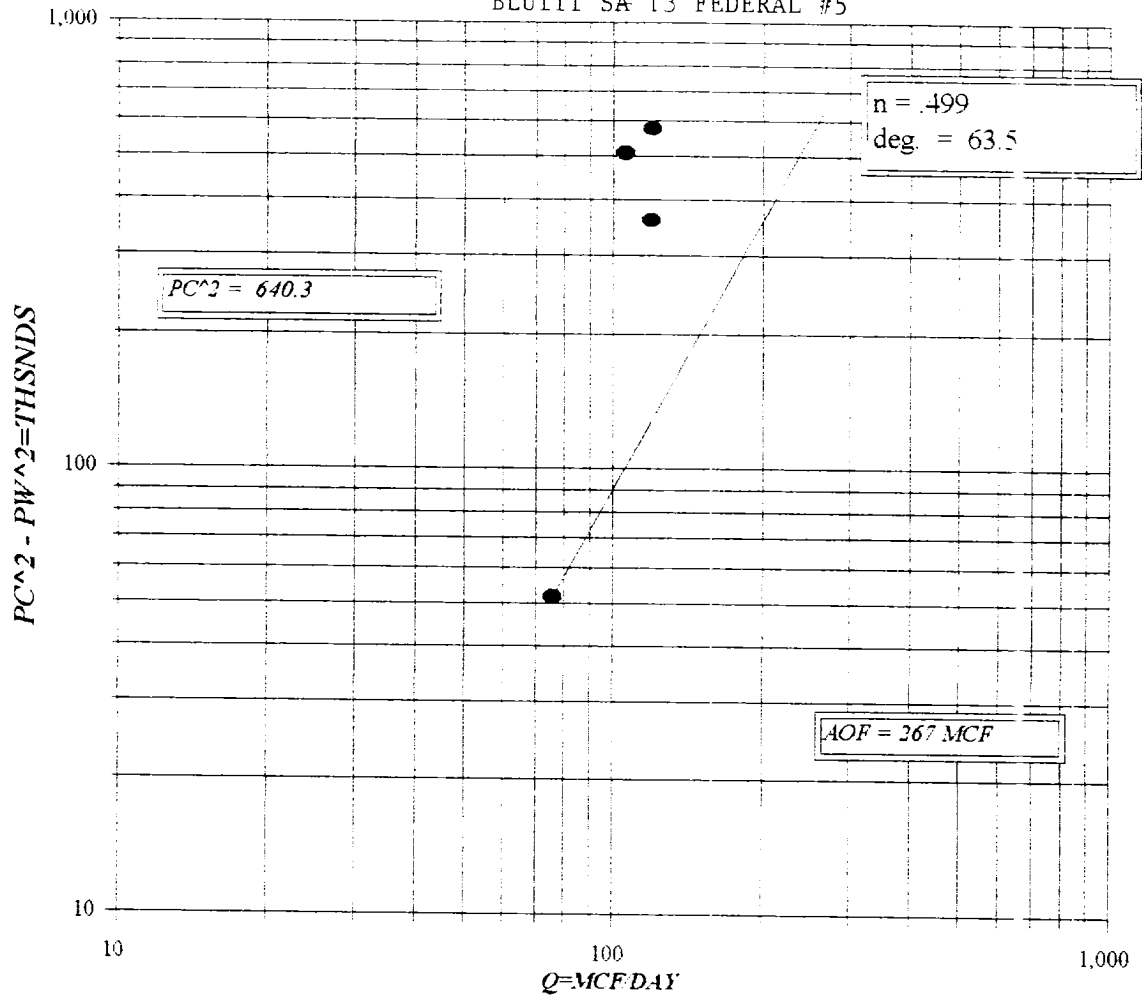
Well Head Temp

Date	Time	Choke	Tbg PX	Csg PX	Gns	Oil Meter	BBL Oil Per Hr	Water Meter	BBL H ₂ O Per Hr	Total Water	Diff Press	Static Press	Gas Rate	Comments
11:00am			840											
11:15	7/64	787			100°						1.0	2.4	130	
11:30	7/64	763			105°						1.0	2.3	125	
11:45	7/64	761			105°						.7	2.3	87	
12:00	7/64	754			104°						.7	2.3	87	
12:15	8/64	701			98°						1.4	2.5	189	
12:30	8/64	623			101°						1.2	2.5	140	
12:45	8/64	552			100°						1.1	2.5	149	
1:00	8/64	517			100°						1.0	2.5	135	
1:15	9/64	437			102°						1.1	2.5	149	
1:30	9/64	395			103°						1.0	2.5	135	
1:45	9/64	382			101°						1.0	2.5	135	
2:00	9/64	354			104°						.9	2.5	122	
2:15	10/64	304			103°						1.0	2.5	135	
2:30	10/64	279			102°						1.0	2.5	135	
2:45	10/64	243			99°						1.0	2.5	135	
3:00	10/64	239			96°						1.0	2.5	135	
Perfs: 4484 to 4555 Tbg 2 3/8 Packer @ 4443 Csg Size - 5 1/2 14# No fluid.														

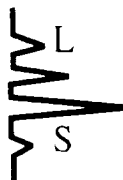
1.50 Flat: 54.133 2.08

SAGA PETROLEUM

BLUITT SA 13 FEDERAL #5



JAN 8/02
K. L. (M. C.)
H. C. C.
C.



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Metering & Testing Services Inc.
Attention: Mr. Tom Duncan
2807 West County Road
Hobbs, New Mexico 88240

SAMPLE:
IDENTIFICATION: Bluit 1305
COMPANY: Saga Petroleum
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 12/27/01 2:30 pm
ANALYSIS DATE: 12/28/01
PRESSURE - PSIG 75
SAMPLE TEMP. °F 95
ATMOS. TEMP. °F 45

GAS (XX) LIQUID ()
SAMPLED BY: Shannon Johnson
ANALYSIS BY: Vickie Biggs

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H ₂ S)		
Nitrogen (N ₂)	6.803	
Carbon Dioxide (CO ₂)	5.934	
Methane (C ₁)	74.691	
Ethane (C ₂)	7.193	1.919
Propane (C ₃)	3.434	0.944
I-Butane (IC ₄)	0.426	0.139
N-Butane (NC ₄)	0.924	0.291
I-Pentane (IC ₅)	0.184	0.067
N-Pentane (NC ₅)	0.150	0.054
Hexane Plus (C ₆ +)	0.261	0.113
	100.000	3.527
BTU/CU.FT. - DRY	1038	MOLECULAR WT. 21.4418
AT 14.650 DRY	1035	
AT 14.650 WET	1017	
AT 14.73 DRY	1040	
AT 14.73 WET	1022	
SPECIFIC GRAVITY -		
CALCULATED	0.740	
MEASURED		

12/28/01
10:00 AM
100

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division

1625 N. French Dr.

Hobbs, NM 88240

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000**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.

File Serial No.

NMNM044216

6. If Indian, Allottee or Tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

SAGA PETROLEUM LLC

3a. Address

415 W WALL, SUITE 1900 MIDLAND, TX 79701

3b. Phone No. (include area code)

(915)684-4219

8. Well Name and No.

Bluitt SA 13 Federal #5

9. API Well No.

30-041-20213

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1980' FNL & 660' FWL

Sec 13 (E) T8S, R37E

10. Field and Pool, or Exploratory Area

Bluitt San Andres Assoc

11. County or Parish, State

Roosevelt

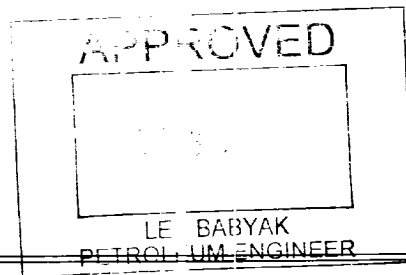
NM

12. CHECK 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
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☒ Recomplete	☐ Other _____
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
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Intend to recomplete this SI WIW to the P1 San Andres as a gas well
Sqz P2 perfs by mixing & pump into the P2 San Andres perfs thru tbg & cmt retainer 75 sx Premium Plus (Class C) cmt w/0.3% FLA. Perf 14 holes in the P1 San Andres from 4499' - 4575'. Frac Procedure: Pump 5000 gal 30# borate xlink gel pad, 8000 gal 30# borate xlink gel (in 4/2000 gal stages) w/1-4 ppg 20/40 or 16/30 sand. Flush to btm perf w/2% slick KCL @ AIR 12 BPM, max press 4500#, estimated avg treat press 3200 psi. SI overnight to break gel, RIH w/swab, swab well back to frack tank to kick off well. Flow to atmosphere until well cleans up. After clean up, SI for 72-96 hrs, RIH w/BHP gauge & run 4 point CAOF test. Connect to sales line.

**PLEASE SUBMIT 3160-4 COMPLETION REPORT
WHEN WORK IS DONE AND WELL IS TESTED**

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Bonnie Husband

Title

PRODUCTION ANALYST

Signature

Date

11/13/2001

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

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