

Additional data for EC transaction #221197 that would not fit on the form

Wells/Facilities, continued

Agreement	Lease	Well/Fac Name, Number	API Number	Location
NMLC031670B	NMLC031670B	SEMU BURGER B 108	30-025-26269-00-S3	Sec 20 T20S R38E NWSW 1980FSL 330FWL
NMLC031670B	NMLC031670B	SEMU BURGER B 108	30-025-26269-00-S4	Sec 20 T20S R38E NWSW 1980FSL 330FWL



SEMU 108
 API#: 30-25-26269
 Skaggs Drinkard Field
 Lea County, New Mexico

The purpose of the proposed project is to add GRAYBURG perforations to the current interval. This well was originally completed in the: Original TD: 6750' PBD: 6704

BLINEBRY (5793-6151) Brkdwn perms w/5,600 G 15% HCL-NEFE acid @ 12 bpm & 56 BS. Form @ 3,500#, BO during flush to 6,500#, ISIP=2,200#, Avg rate=10.5 bpm 8.1.1979

TUBB (6264-6655) . 88,000 G gelled fluid, 169,000# 20/40 & 10/20 sd & 15 BS. ATP=5,000# @ 31 bpm, ISIP=2,300#.

Well Category 1 due to a 100 ppm H₂S ROE < 50'.

This well is not capable of hydrocarbon flow.

Class 2, 3000 psi, Hydraulic BOP is recommended.

No choke manifold is to be used. **ONE BOP EXCEPTION:** One untested barrier – dynamic fluid column.

H ₂ S	ROE- ft.
100 ppm	4
500 ppm	2

BOPE Class One: Hydraulic BOP recommended per Projects Group.

PROCEDURE

1. Prior to service unit MI & RU, dump 20 bbl xylene down 2-3/8" x 5-1/2" annulus. Pump back xylene. Test anchors. Last well service 8.25.2008.
2. Spot 9 clean 500 bbl frac tanks. Load tanks w/ fresh water prior to frac date. Water to be biocide-treated by Service Company.
3. MI & RU service unit. Un-seat pump. POOH w/ rods & pump. ND well. NU hydril 1 X 7-1/16" 5K Blowout Preventer (Single BOP: blinds) and environmental tray. Scan 2-3/8", 4.7# J-55 production tbg out of hole. LD Tbg.
4. The following is a summary of the current well configuration:

Spud Date: 6.28.97	Rls Date: 7.6.97	Depth RKB		Elev.: 3537 KB; 3554 GL (KB - GL: 17 ft.)
		top	btm	
9-5/8", 8.92, 36#, K55,		0	1400	Lead: 570 Sxs , Class C @ 12.7 ppg
Hole Size: 12.25,				TOC @ surface
7", 6.28, 26# K55 , Hole: 8.75"		0	6750	1st Stage : 1050 sxs @ 12 ppg
DV tool: 2999.0				2st Stage : 1740 sxs @ 12.8 ppg
4 1/2", 4.0, 11.6# K55 , Hole: 6.25"		5662	7800	Cemented with 260 sxs of class C . TOC by Ts
Mud weight : 10 ppg @ TD (7800')				

Perforations:

Formation	Perforations (MD)	Net Total <ft>	Frac Grad	SPF	Phase	Anticipated Reservoir Pressure	Anticipated Reservoir Temperature
Grayburg	3810-3816, 3855-3861, 3875-3886, 3904-3910,	29	0.8	1	120	1800	109°

Formation Horizons Tops:

Formation	top
1570	RUSTLER
1660	SALADO
2870	YATES
4280	SAN ANDRES
5550	GLORIETA
6035	BLINEBRY
6530	TUBB
6657	DRINKARD
6980	ABO

5. TIH with open ended tubing (3-1/2", 9.3#, N-80 tbg work string). Fill hole with 3 bbls of 14.8 ppg mud up to 5561. Pull up hole. Mix and pump 16 sxs of Class C cement as a plug to isolate Glorieta Formation. Plug should be 111' in length. POOH with WS. WOC.
6. RIH w 3-1/2", 9.3#, N-80 tbg work string tbg w/ 4-3/4" bit & 5-1/2", 17# csg scraper to 4000. Circulate bottoms up. Well Capacity w tubing 93 bbl. POOH with WS and bit. LD scraper and bit.
7. NU lubricator with hydraulic pack off previously shop tested @ 5K. RU SLB logging tool. Run RST tool with Gamma ray in Combo. Logging from 3500' to 4500'. **Contact Clint Moeglein 432-664-9559 Quote #: BSP-00554. POOH with RST and GR tools. 3 print copies and 1 .LAS file should be sent to Libardo Gonzalez (432 202 8536 in Odessa Tx)**
8. RU SLB Perforators.

Perforate following intervals at 3 spf @ 60-degree phasing w/ 3-3/8", HSD Power Jet 3406, HMX, 22.8 gm. (EHD: 0.37 in.; Penetration: 37 in.)...

	top	btm	ft.	SPF	Perfs
Grayburg	3930	3940	10	3	30
	3949	3955	6	3	18
	3973	3985	12	3	36
	4005	4012	7	3	21
			35		105

9. RIH w/ tbg, PKR & CIBP with ball catcher. Test tbg @ 8500# while RIH (3-1/2", 9.3#, N-80 Internal Yield Prs: 10,160#). Acidize Grayburg perforations w/ total 75 bbl (3150 gal) 15% NE Fe HCl:

Acidize Partial Interval (3930-4012):

- a. Set CIBP @ 4100 (between perf: 4012 & csg collar: 4120)
- b. Set packer @ 3920. Circulate wellbore fluid out. Test 3-1/2" x 5-1/2" annulus & PKR @ 500#. Break Perfs.
- c. Pump 15% NE Fe HCl using 70, 5/8" RCN balls followed by 4.3 bbl 2% KCl.
- d. SD and allow well to equalize.
- e. Pump w/ 23 bbl 2% KCl to flush to bottom perf.
- f. Record ISIP, SITP (5 min), SITP (10 min) & SITP (15 min).]
- g. Reset packer to 3750'

Note: Due to the configuration of the wellbore there may be problems setting the packer @ 3920 to acidize partial interval (3930-4012) due to only 20ft of blanket pipe between bottom of existing perfs (3910) and top of new perfs (3930). At that point it is recommended to set packer between set of existing perfs (3810-3816 & 3855-3861) and extend the EOT to 3920.

10. RU **HALLIBURTON**. Set treating line pop-off to release @ 8500#.
Set pump trips @ 8000#.
Install spring-operated relief valve on csg-tbg annulus. Pre-set @ 500#.
Load 3-1/2" x 5-1/2" annulus. Note annulus fills volume. Place 200# on csg.
Test surface lines @ 9000#.
Frac **3810-4012** down 3-1/2", 9.3#, N-80 tbg as per attached schedule (see attachments).
Anticipated treating rate: **30 BPM @ 6800#:**
- Report ISIP, SITP (5 min), SITP (10 min) & SITP (15 min). RD SLB. SDON.
11. SI for a minimum of 18 hrs to allow resin-coated sand to cure. Flow back well until dead. Starting flowback rate should not be higher than 1/2 bbl /min. **MIRU**, Release packer, tag for fill, If needed rig up reverse unit and circulate wellbore clean. POOH & LD 3-1/2", 9.3#, N-80 frac string & PKR.
12. RIH. w / 2 3/8" tubing (hydro testing while going in hole) NDBOP. NUWH and run with rods as per Rodstar design. Space pump, hang well, load tubing and check pump action. RDMO. Handover to Operations.

Attachments:

1. Pump Schedule.



Microsoft Office
Excel Worksheet

SEUM 108

Stage	Rate	Fluid Type	Propant type	Propant conc	Stage Mass	Stage time	Cum Time	Clean Volumes				Slurry volumes			
								Gals	Bbls	Cum gals	Cum Bbls	Gals	Bbls	Cum Gals	Cum Bbls
Pad		30 Linear Gel				26	26	33000	786	33000	786	33000	786	33000	786
1 Sand Stage		30 XL Fluid	20/40 Brown	0.25	1000	3	29	4000	95	37000	881	4038	96	4038	882
2 Sand Stage		30 XL Fluid	20/40 Brown	0.5	2000	3	33	4000	95	41000	976	4075	97	4075	979
3 Sand Stage		30 XL Fluid	20/40 Brown	0.75	3000	3	36	4000	95	45000	1071	4113	98	4113	1077
4 Sand Stage		30 XL Fluid	20/40 Brown	1	4000	3	39	4000	95	49000	1167	4151	99	4151	1176
5 Sand Stage		30 XL Fluid	20/40 Brown	1.25	5000	3	43	4000	95	53000	1262	4189	100	4189	1275
6 Sand Stage		30 XL Fluid	20/40 Brown	1.5	6000	3	46	4000	95	57000	1357	4226	101	4226	1376
7 Sand Stage		30 XL Fluid	20/40 Brown	1.75	7000	3	49	4000	95	61000	1452	4264	102	4264	1478
8 Sand Stage		30 XL Fluid	20/40 Brown	2	8000	3	53	4000	95	65000	1548	4302	102	4302	1580
9 Sand Stage		30 XL Fluid	20/40 Brown	2.25	9000	3	56	4000	95	69000	1643	4340	103	4340	1683
10 Sand Stage		30 XL Fluid	20/40 Brown	2.5	10000	3	60	4000	95	73000	1738	4377	104	4377	1788
12 Sand Stage		30 XL Fluid	20/40 Brown	2.75	11000	4	63	4000	95	77000	1833	4415	105	4415	1893
13 Sand Stage		30 XL Fluid	20/40 Brown	3	12000	4	67	4000	95	81000	1929	4453	106	4453	1999
14 Sand Stage		30 XL Fluid	20/40 Brown	3.25	13000	4	70	4000	95	85000	2024	4491	107	4491	2106
15 Sand Stage		30 XL Fluid	20/40 RC	3.5	14000	4	74	4000	95	89000	2119	4528	108	4528	2213
16 Sand Stage		30 XL Fluid	20/40 RC	3.75	15000	4	77	4000	95	93000	2214	4566	109	4566	2322
17 Sand Stage		30 XL Fluid	20/40 RC	4	16000	4	81	4000	95	97000	2310	4604	110	4604	2432
18 Sand Stage		30 XL Fluid	20/40 RC	4	16000	4	85	4000	95	101000	2405	4604	110	4604	2541
Spot Acid		30 15% HCL				0	85	500	12	101500	2417	500	12	500	2553
Flush		10 2% KCL				3	88	1300	31	102800	2448	1300	31	1300	2584

Total treatment time < Hr >	1.5
Total propan< Lbs >	152000
20/40 Brown	91000
20/40 RC	61000
Fluids Breakdown Clean < Gals >	101500
Linear Gel	33000
15% HCL	500
XL Fluid	68000
Frac tanks to line up	9

Power Requirements

MAX HHP <HP>	6111.29035
Input Power <KW>	827.993748

MD Top	MD Bottom	Net Footage	TVD Top	TVD Bottom	SPF	# of perf
3671	3684	13	3671	3684	1	13
3694	3696	2	3694	3696	1	2
3703	3705	2	3703	3705	1	2
3732	3744	12	3732	3744	1	12
3752	3758	6	3752	3758	1	6
3730	3773	43	3730	3773	1	43
3823	3839	16	3823	3839	1	16
3834	3840	6	3834	3840	1	6
3844	3850	6	3844	3850	1	6
3856	3859	3	3856	3859	1	3
3882	3885	3	3882	3885	3	9
3912	3917	5	3912	3917	3	15
3926	3929	3	3926	3929	3	9
3949	3951	2	3949	3951	3	6
3955	3961	6	3955	3961	3	18
Midperf:	3816	128				166