

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Table with 2 columns and 11 rows containing well information: SUNDRY NOTICES AND REPORTS ON WELLS, Type of Well, Name of Operator, Address of Operator, Well Location, Elevation, etc.

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK, PLUG AND ABANDON, etc.
SUBSEQUENT REPORT OF: REMEDIAL WORK, ALTERING CASING, etc.
OTHER: SWD Conversion [checked]

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

See attached page

Spud Date: []

Rig Release Date: []

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

SIGNATURE David Cain TITLE Engineering Technologist & Regulatory Specialist DATE 10-11-2023

Type or print name David Cain E-mail address: david.cain@longfellowenergy.com PHONE: 972-590-9918

For State Use Only

APPROVED BY: TITLE DATE
Conditions of Approval (if any):

**Muskegon 20 State Com 1
30-015-26397
Subsequent SWD Conversion Procedure**

- 8/22/2022 Pull 2 3/8" tbg out of well.
- 8/24/2022 Set CIBP @ 9500' and tested casing. Injecting fluid into well.
- 8/26/2022 Ran CBL and found TOC @ 8140' & squeeze cement from 4000' – 2540'.
- 9/21/2022 Performed two stages of remedial cementing 7900' – 4100'.
- 10/6/2022 Drilled out CICRs, CBPs and cement. Tested casing to 660 psi. Minimal leak-off on casing. Ran CBL. Good cement from 8100' – 2540'.
- 10/22/2022 Performed 3 stages of acid stimulation from 9395' – 9080'. Total acid was 56,000 gal of 20% & 28% acid.
- Set Wireline RBP @ 9015'
- 11/17/2022 Performed two stage resin cementing operation from 5400' – 5300' & 4000' – 2500'. Drilled out resin and CBPs. Tested casing to 660 psi and held
- Pulled WRBP @ 9015'. Set Packer @ 9023' and RIH w/ 3 1/2" injection string.
- 12/12/2022 Attempted multiple pressure tests and would not hold pressure.
- Unset packer and reset packer @ 8990'. Unlatched off packer and POOH w/ 3 1/2" tbg. RIH w/ 5.5" packer and 2 3/8" tbg.
- Test packer and casing. Found multiple small leaks @ packer depth, 7900' and between 4000' – 3000' (<.5 psi/min). Decision to retest with 3.5". POOH and L/D 2 3/8"
- 1/23/2023 RIH w/ 3 1/2" tubing and latch onto packer. Tested to 800 psi. Leaked off .5 – 1 psi/min and would not stabilize. Decision to test if 4.5" Flush Jt casing would run into well.
- Unlatch off packer and POOH w/ 3 1/2" tbg. P/U 4 3/4" bit, 3 x 4 3/4" reamers and 3 1/2" DCs and 2 7/8" PH6. RIH to 8907' and did not tag.
- 1/26/2023 RIH w/ 3 1/2" tbg and latch onto packer. POOH w/ 3.5" tbg and packer. Set CBP @ 9050' acid.
- 5/9/2023 RIH w/ 4 3/4" bit and 2 3/8" tbg. Tag CBP and circ well clean.
- M/U 4.5" flush jt 12.6# casing. Tag CBP @ 9048'.
- 5/17/2023 Pump 129 bbls of 13 ppg cement. Circulated 217 sx of cement to surf
- 5/30/2023 P/U 3 3/4" bit and 6 x 3 1/8" DCs. Tag Cement @ 8406'. Drill out to 9406'.
- 6/6/2023 P/U 4.5" AS-1X Injection packer and 2 7/8" 7.9# & 6.5# tbg. Set pkr @ 9022'. Test casing to 1800 psi.

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Wellbore Schematic

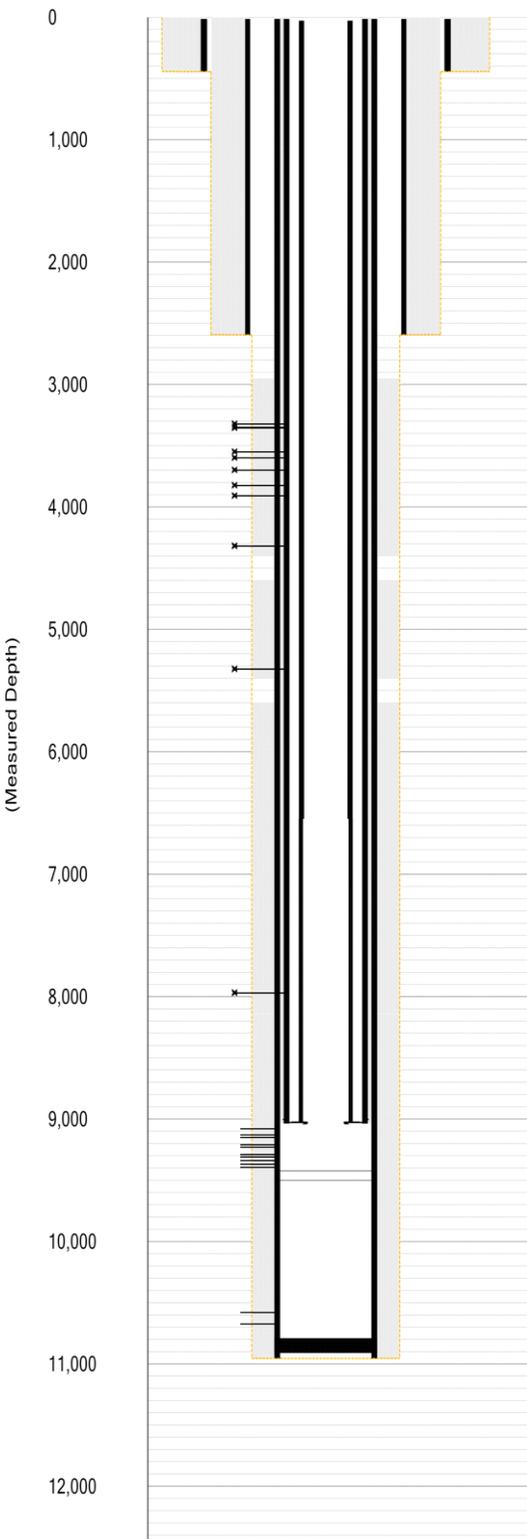
Printed: 10/11/2023

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Muskegon State 20 Com # 1 **API # 30-015-26397**

Muskegon State 20 Com # 1, 10/11/2023

1980 FNL & 660 FEL	GL Elev: 3,605.00	KOP:	
Section 20, Township 17S, Range 29E		EOC:	
County, State: Eddy, NM		Fill Depth:	9,421
Aux ID:		PBTD:	9,500.00
'KB' correction: 15; All Depths Corr To: KB		TD:	10,957.00
		BOP:	7 1/16



Hole Size

Diameter	Top At	Btm At	Date Drilled
17.5000	0.00	445.00	8/28/1990
12.2500	445.00	2,594.00	9/3/1990
7.8750	2,594.00	10,957.00	9/25/1990

Surface Casing

Date Ran: 8/28/1990

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	11	13.3750	48.00	H40	430.00	15.00	445.00

Intermediate Casing

Date Ran: 9/3/1990

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	64	8.6250	24.00	J55	2,579.00	15.00	2,594.00

Production Casing

Date Ran: 9/25/1990

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	150	5.5000	17.00	J55	6,689.00	15.00	6,704.00
Casing	50	5.5000	17.00	N80	2,235.00	6,704.00	8,939.00
Casing	45	5.5000	17.00	S-95	2,018.00	8,939.00	10,957.00

Production Liner

Date Ran: 5/31/2023

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	207	4.5000	12.60	13CR95	6,219.55	15.00	6,234.55
Marker Jt	1	4.5000	12.60	13CR95	24.62	6,234.55	6,259.17
Casing	91	4.5000	12.60	13CR95	2,743.44	6,259.17	9,002.61
Float Collar	1	4.5000			1.69	9,002.61	9,004.30
Casing	1	4.5000	12.60	13CR95	30.08	9,004.30	9,034.38
Float Shoe	1	4.5000	12.60	13CR95	1.74	9,034.38	9,036.12

Cement

Top At	Btm At	I D	O D	TOC Per	# - Type	# Sx	Class	Wt.
0.00	445.00	13.375	17.500	Circ	1 - Lead	200	Thix	
					2 - Tail	475	C	
					3 - Lead	100	C	
					4 - Lead	150	C	

Did not circ. Tag 1" @ 200'. Pump 100 sx. Tag TOC @ 135', pump 150 sx and circ cmt.

0.00	2,594.00	8.625	12.250	Circ	1 - Lead	1150	C	
					2 - Tail	300	C	

Circ 159 sx

8,140.00	10,957.00	5.500	7.875	TS	1 - Lead	700	H	15.60
2,950.00	3,910.00	5.500	7.875	CBL	1 - Lead	120	60/40 Poz	

Suicide squeeze f/ squeeze holes through casing leak

0.00	9,035.00	4.500	5.500	Circ	1 - Lead	510	Lite	13.00
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4.5" Flush Jt Cement Operation

5,600.00	8,140.00	5.500	7.875	CBL	1 - Lead	320		13.50
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Suicide Squeeze

4,600.00	5,400.00	5.500	7.875	CBL	1 - Lead	120		13.50
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Suicide Squeeze

3,910.00	4,400.00	5.500	7.875	CBL	1 - Lead	125		13.50
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Squeeze

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Santa Fe, NM 87505

CONDITIONS

Action 274780

CONDITIONS

Operator: LONGFELLOW ENERGY, LP 8115 Preston Road Dallas, TX 75225	OGRID: 372210
	Action Number: 274780
	Action Type: [C-103] Sub. (Re)Completion Sundry (C-103T)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	None	10/12/2023