Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018

5.	Lease Serial No.
	NOOC14205825

SUNDRY	NOOC14205825 6. If Indian, Allottee or Tribe Name EASTERN NAVAJO 7. If Unit or CA/Agreement, Name and/or No. NMNM112674 8. Well Name and No. JIM THORPE COM 90									
Do not use the abandoned we										
SUBMIT IN										
1. Type of Well Gas Well M Oth										
2. Name of Operator	□ Oil Well □ Gas Well ☑ Other: COAL BED METHANE 2. Name of Operator Contact: ALIPH REENA DUGAN PRODUCTION CORPORATION CORPORATION CORPORATION CORPORATION CORPORATION CORPORATION CORPORATION CORPORATION CORPORATION CORP									
3a. Address	TOTO (Treat Wall, disprissoon)		(include area code)		30-045-35684-0					
FARMINGTON, NM 8749904	20	Ph: 505-32			BASIN FRUITLA	AND COAL				
4. Location of Well (Footage, Sec., T	C., R., M., or Survey Description	1)			11. County or Parish, S	State				
Sec 3 T23N R10W SWNE 149 36.258990 N Lat, 107.879740					SAN JUAN COL	JNTY, NM				
12. CHECK THE A	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE O	F NOTICE,	REPORT, OR OTH	IER DATA				
TYPE OF SUBMISSION			TYPE OF	ACTION						
□ Notice of Intent	☐ Acidize	□ Dee	pen	☐ Product	ion (Start/Resume)	☐ Water Shut-Off				
	☐ Alter Casing	☐ Hyd	raulic Fracturing	☐ Reclam	ation	☐ Well Integrity				
	☐ Casing Repair		Construction	□ Recomp		☑ Other Drilling Operations				
☐ Final Abandonment Notice	☐ Change Plans ☐ Convert to Injection	☐ Plug ☐ Plug	and Abandon	☐ Tempor☐ Water D	orarily Abandon					
Drill to TD @ 1296' on 7/21/17 float collar @ 1239'. Cement 1.95 cu ft/sk, 10.07 gals/sk mi w/50-50 cement blend 37% pc CFR3 and 2% CaCl2 as tail 460 cu ft, 82 bbls. Displaced #1 released 6/21/17. Pressure	w/165 sks, 322 cu ft, Hall x water) as lead cement f oz, 1% bwoc bentonite, 5 13.5#/gal, 1.38 cu ft/sk, 5 w/29.5 bbls water. Circul	iburton HalCe followed by 10 #/sk Kol-seal, .85 gals/sk mi ated 30 bbls o	m cement blend 0 sks - 138 cu ft 0.125#/sk Pol-E x water. Total c cement to surfac	(12.4#/gal, :- Class G -Flake, 0.1% ement volur	bwoc ou cons	3. DIV DIST. 3				
14. I hereby certify that the foregoing is	true and correct. Electronic Submission # For DUGAN PRODU mmitted to AFMSS for pro	CTION CORP	RATION, sent to	the Farming	iton					
Name (Printed/Typed) ALIPH RE	ENA	ICTION EN	GINEER							
Signature (Electronic S	Submission)		Date 07/31/20	017						
(2000)	THIS SPACE FO	DR FEDERA			SE					
Approved By ACCEPT	ED		JACK SAV TitlePETROLE		ER	Date 08/04/2017				
Conditions of approval, if any, are attached ertify that the applicant holds legal or equivalent would entitle the applicant to conductive	itable title to those rights in the		Office Farming			Date 00/04/2017				
Fitle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s			rson knowingly and		ke to any department or a	agency of the United				

(Instructions on page 2) ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

OIL CONS. DIV DIST. 3 AUG 1 0 201/

HALLIBURTON

iCem® Service

DUGAN PRODUCTION CORP EBUS

For: MARTY FOUTZ
Date: Friday, July 21, 2017

JIM THORPE COM 90

JIM THORPE COM 90 DUGAN Job Date: Friday, July 21, 2017

Sincerely,

LEMONT JOJOLA

Legal Notice

Warning Disclaimer

Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

Limitations of Liability

Except as expressly set forth herein, there are no representations or warranties by Halliburton, express or implied, including implied warranties of merchantability and/or fitness for a particular purpose. In no event will Halliburton or its suppliers be liable for consequential, incidental, special, punitive or exemplary damages (including, without limitation, loss of data, profits, use of hardware, or software). Customer accepts full responsibility for any investment made based on results from the Software. Any interpretations, analyses or modeling of any data, including, but not limited to Customer data, and any recommendation or decisions based upon such interpretations, analyses or modeling are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional may differ. Accordingly, Halliburton cannot and does not warrant the accuracy, correctness or completeness of any such interpretation, recommendation, modeling or other products of the Software Product. As such, any interpretation, recommendation or modeling resulting from the Software for the purpose of any drilling, well treatment, production or financial decision will be at the sole risk of Customer. Under no circumstances will Halliburton or its suppliers be liable for any damages.

© 2015 Halliburton. All Rights Reserved

Customer: DUGAN PRODUCTION CORP EBUS

Job: PRODUCTION

Case: DUGAN | SO#: 904165412

Table of Contents

1.0	Job Design	4
1.1	Overview	4
1.2	Pump Schedule	4
2.0	Real-Time Job Summary	5
2.1	Job Event Log	5
3.0	Attachments	8
3.1	DUGAN JIM THORPE COM 90 PRODUCTION-Custom Results.png	5

Customer: DUGAN PRODUCTION CORP EBUS

Job: PRODUCTION

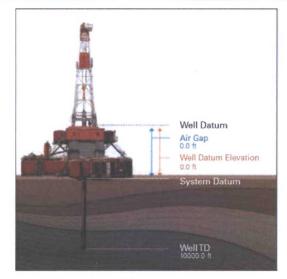
Case: DUGAN | SO#: 904165412

1.0 Job Design

1.1 Overview

Job Type	Primary Cement Job
Injection Path	Casing/Conventional
Foam Job	No .

Well Snapshot



Simulations Performed

1.2 Pump Schedule

Stage No.	Density (ppg)	Rate (bbl/min)	Yield (ft³/sack)	Water Req. (gal/sack)	Volume (bbl)	Bulk Cement (sacks)	Duration (min)
1	8.50	5.00			0.00		0.00
2	8.33	3.00			20.00		6.67
3	12.40	3.00	1.9468	10.069	57.21	165.00	19.07
4-1	13.50	3.00	1.3666	5.687	24.34	100.00	8.11
4-2			1.3666	5.687		0.00	5.00
5	8.33	3.00			28.97		9.66
				Total:	123.59		48.60
	1 2 3 4-1 4-2	(ppg) 1 8.50 2 8.33 3 12.40 4-1 13.50 4-2	(ppg) (bbl/min) 1 8.50 5.00 2 8.33 3.00 3 12.40 3.00 4-1 13.50 3.00 4-2	(ppg) (bbl/min) (ft³/sack) 1 8.50 5.00 2 8.33 3.00 3 12.40 3.00 1.9468 4-1 13.50 3.00 1.3666 4-2 1.3666	(ppg) (bbl/min) (ft³/sack) (gal/sack) 1 8.50 5.00 2 8.33 3.00 3 12.40 3.00 1.9468 10.069 4-1 13.50 3.00 1.3666 5.687 4-2 1.3666 5.687 5 8.33 3.00	(ppg) (bbl/min) (ft³/sack) (gal/sack) (bbl) 1 8.50 5.00 0.00 2 8.33 3.00 20.00 3 12.40 3.00 1.9468 10.069 57.21 4-1 13.50 3.00 1.3666 5.687 24.34 4-2 1.3666 5.687 5.687 28.97	(ppg) (bbl/min) (ft³/sack) (gal/sack) (bbl) (sacks) 1 8.50 5.00 0.00 2 8.33 3.00 20.00 3 12.40 3.00 1.9468 10.069 57.21 165.00 4-1 13.50 3.00 1.3666 5.687 24.34 100.00 4-2 1.3666 5.687 0.00

^{*}Pump schedule may include additional rows for displacement if "Automatic Rate Adjustment" was enabled and ECDs approached the fracture gradient.

Customer: DUGAN PRODUCTION CORP EBUS

Job: PRODUCTION

Case: DUGAN | SO#: 904165412

2.0 Real-Time Job Summary

2.1	Job Eve	nt Log							_				
	Туре	Seq. No.	Activity	Graph Label	Date .	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Pass-Side Pump Rate (bbl/min)	PS Pmp St Tot (bbl)	8	Comments
	Event	1	Call Out	Call Out	7/21/2017	08:00:00	USER	· · ·					CEMENT CREW CALLED OUT
	Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	7/21/2017	10:20:00	USER	-					SAFETY MEETING HELD WITH CEMENT CREW
	Event	3	Depart Home for Location	Depart Home for Location	7/21/2017	10:30:00	USER	_	-	-			1-PICKUP 11583927, 1- RED TIGER 12638114, 1- BULK TRUCKS 10897805 - 10025104
	Event	4	Arrive At Loc	Arrive At Loc	7/21/2017	12:00:00	USER						CEMENT CREW ARRIVES ON LOCATION
	Event	5	Comment	Comment	7/21/2017	12:10:00	USER	-	_	-			RIGCREW IS RUNNING IN WITH LAST JOINT OF DRILL PIPE
	Event	6	Other	Other	7/21/2017	12:20:00	USER						TD = 1296 FT, TP = 5 1/2: 15.5# SET @ 1281 FT, SJ = 42 FT, OH = 7 7/8", SURFACE = 8 5/8" 24# SET @ 126 FT
	Event	7	Other	Other	7/21/2017	12:30:00	USER						TEMPERATURE = 62 DEGREES, CHLORIDES = 0, PH = 7
	Event	. 8	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	7/21/2017	17:30:00	USER						SAFETY MEETING HELD WITH CEMENT CREW
	Event	9	Rig-Up Equipment	Rig-Up Equipment	7/21/2017	17:40:00	USER						CEMENT CREW RIGS UP EQUIPMENT
	Event	10	Pre-Job Safety Meeting	Pre-Job Safety Meeting	7/21/2017	18:10:34	USER	16.00	0.00	0.00	0.	.0	SAFETY MEETING HELD WITH EVERYONE ON LOCATION

iCem® Service

(v. 4.2.393) Created: Friday, July 21, 2017

Customer: DUGAN PRODUCTION CORP EBUS

Job: PRODUCTION

Case: DUGAN | SO#: 904165412

Event	11	Start Job	Start Job	7/21/2017	18:29:40	сомѕ					CHECK WEIGHT = 12.4#
Event	12	Pressure Test	Pressure Test	7/21/2017	18:44:29	USER	3685.00	8.40	0.00	0.0	PRESSURE TEST GOOD TO 3400 PSI
Event	13	Pump Spacer 1	Pump Spacer 1	7/21/2017	18:53:36	USER	30.00	8.31	0.00	0.0	PUMPED 10 BBLS H20
Event	14	Pump Lead Cement	Pump Lead Cement	7/21/2017	18:57:31	USER	64.00	9.12	3.00	11.0	165 SKS 1.95 CUFT/SK 10.07 GAL/SK = 57.3 BBLS @ 12.4# 39.6 BBLS H2O REQ
Event	15	Pump Tail Cement	Pump Tail Cement	7/21/2017	19:17:08	USER	39.00	13.27	3.50	1.3	100 SKS 1.38 CUFT/SK 5.85 GAL/SK = 24.6 BBLS @ 13.5# 13.9 BBLS H2O REQ
Event	16	Check Weight	Check weight	7/21/2017	19:18:53	COM5		_			CHECK WEIGHT = 13.5#
Event	17	Cement Returns to Surface	Cement Returns to Surface	7/21/2017	19:27:20	USER	. 69.00	13.49	3.50	36.6	CALCULATED 41 BBLS OF CEMENT BACK TO SURFACE, ACTUALLY CIRCULATED 30 BBLS OF CEMENT BACK TO SURFACE
Event	18	Shutdown	Shutdown	7/21/2017	19:27:32	USER	69.00	13.47	3.50	37.2	SHUTDOWN DROP PLUG
Event	19	Clean Lines	Clean Lines	7/21/2017	19:28:24	USER	36.00	13.53	0.40	0.0	WASH PUMPS AND LINES
Event	20	Pump Displacement	Pump Displacement	7/21/2017	19:31:19	USER	21.00	7.47	1.20	0.3	CALCULATED 29.5 BBLS TO DISPLACE CEMENT, ACTUALLY PUMPED 30.5 BBLS TANK TO TANK MARK TO MARK
Event	21	Bump Plug	Bump Plug	7/21/2017	19:42:03	USER	455.00	7.43	2.40	36.5	CALCULATED 303 PSI TO LAND PLUG, PLUG BUMPED @ 494 PSI PRESSURED UP TO 1100 PSI
Event	22	Check Floats	Check Floats	7/21/2017	19:43:37	USER	51.00	7.41	0.00	36.6	CHECK FLOATS, FLOATS HELD .5 BBLS BACK
Event	. 23	Shutdown	Shutdown	7/21/2017	19:44:31	USER	23.00	7.41	0.00	36.6	SHUTDOWN END JOB, THANK YOU FOR CHOOSING HALLIBURTON LEMONT JOJOLA AND CREW

iCem[®] Service

(v. 4.2.393) Created: Friday, July 21, 2017

Customer: DUGAN PRODUCTION CORP EBUS

Job: PRODUCTION

Case: DUGAN | SO#: 904165412

Event	24	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	7/21/2017	19:50:00	USER	22.00	-0.85	0.00	36.6	SAFETY MEETING HELD WITH CEMENT CREW
Event	25	Rig-Down Equipment	Rig-Down Equipment	7/21/2017	19:55:00	USER					CEMENT CREW RIGS DOWN EQUIPMENT
Event	26	Depart Location Safety Meeting	Depart Location Safety Meeting	7/21/2017	20:10:00	USER					SAFETY MEETING HELD WITH CEMENT CREW
Event	27	Depart Location for Home	Depart Location for Home	7/21/2017	20:20:00	USER					CEMENT CREW DEPARTS LOCATION

Customer: DUGAN PRODUCTION CORP EBUS

Job: PRODUCTION

Case: DUGAN | SO#: 904165412

3.0 Attachments

3.1 DUGAN JIM THORPE COM 90 PRODUCTION-Custom Results.png

