District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011

Permit 299121

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
GREAT WESTERN DRILLING CO P.O. Box 1659 Midland, TX 79701	9338
	3. API Number 30-025-49479

4. Property Code	5. Property Name	6. Well No.
331354	URSSEY TANK DARYL STATE	001

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	36	21S	35E	A	660	N	990	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	36	21S	35E	A	660	N	900	E	Lea

9. Pool Information

JALMAT;TAN-YATES-7 RVRS (OIL)	33820

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3629
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	4600	Seven Rivers		10/1/2021
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	11	9.625	36	1400	388	0
Prod	8.75	5.5	17	4600	878	0

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	3000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Dennis L Hendrix	Approved By:	Paul F Kautz
Title:	Vice President	Title:	Geologist
Email Address:	dhendrix@gwdc.com	Approved Date: 10/26/2021	Expiration Date: 10/26/2023
Date: 10/13/2021	Phone: 432-682-5241	Conditions of Approval Attached	

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	URSSEY TANK DARYL STATE	1

OGRID No.	Operator Name	Elevation
9338	GREAT WESTERN DRILLING COMPANY	3629'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	36	21-S	35-E		660	NORTH	990	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

GEODETIC COORDINATES
NAD 83 NME
SURFACE LOCATION
Y= 525617.1 N
X= 855227.1 E
LAT.=32.440877° N
LONG.=103.315871° W

GEODETIC COORDINATES
NAD 27 NME
SURFACE LOCATION
Y= 525555.8 N
X= 814043.0 E
LAT.=32.440752° N
LONG.=103.315397° W

660'
990'

OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Gary N. Billingsley 8/11/2

Signature Date

Cary N. Billingsley

Printed Name

cbillingsley@gwdc.com

E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 31, 2019

Date of Survey

3239

Signature & Seal of Professional Surveyor

NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR

Ronald J Eidson 01/08/2020

Certificate Number		
	Gary G. Eidson	12641
	Ronald J. Eidson	3239

LSL JWSC W.O.: 19 11 1204

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Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	URSSEY TANK DARYL STATE	1

OGRID No.	Operator Name	Elevation
9338	GREAT WESTERN DRILLING COMPANY	3629'

Surface Location

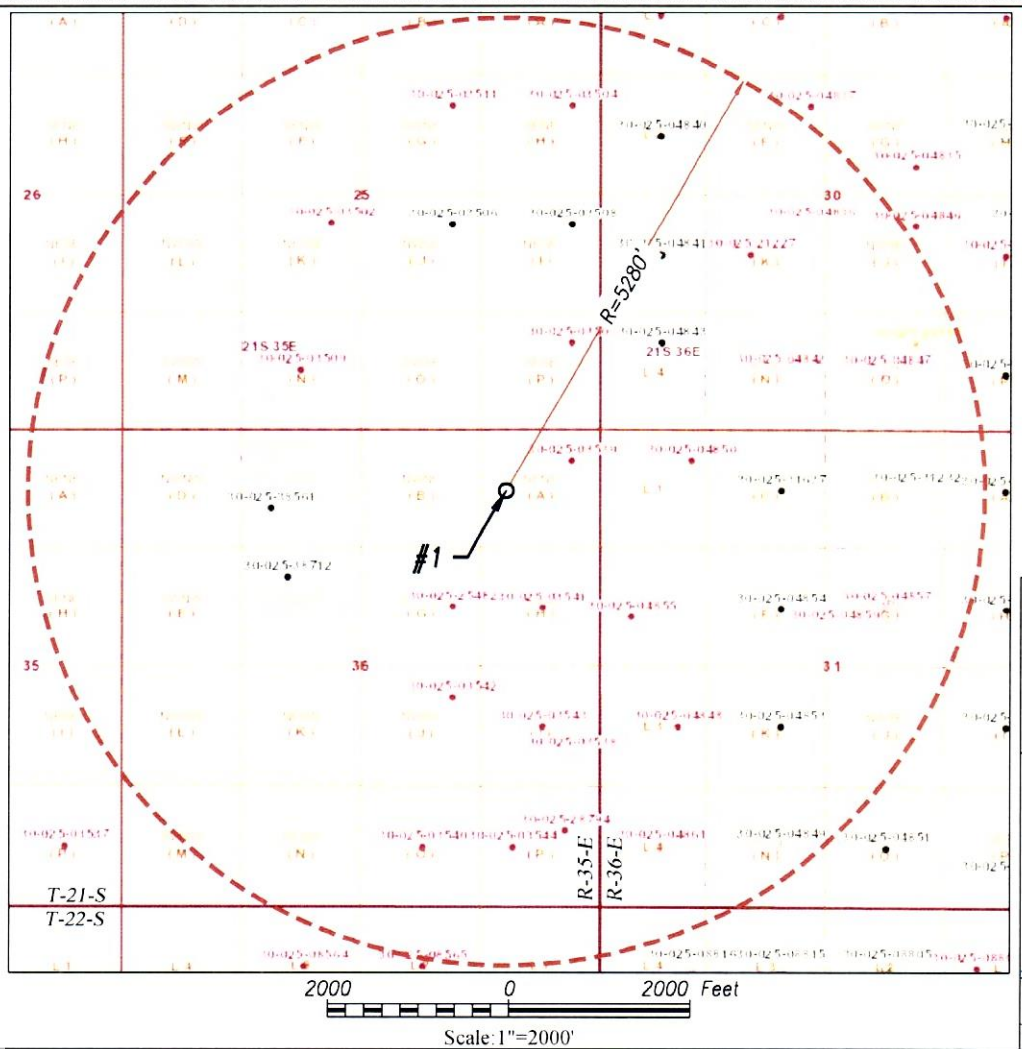
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	36	21-S	35-E		660	NORTH	990	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



LEGEND
O DENOTES PROPOSED WELL

Signature Date

Cary N. Billingsley
Printed Name

cbillingsley@gwdc.com
Email address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 31, 2019
Date of Survey

Signature & Seal of Professional Surveyor

RONALD J. EIDSON
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

Ronald J Eidson 01/08/2020

Certificate Number Gary G. Eidson 12641
Ronald J. Eidson 3239

LSL JWSC W.O. 19.11.1204

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments

Permit 299121

PERMIT COMMENTS

Operator Name and Address:	API Number:
GREAT WESTERN DRILLING CO [9338] P.O. Box 1659 Midland, TX 79701	30-025-49479
	Well: URSSEY TANK DARYL STATE #001

Created By	Comment	Comment Date
pkautz	Latitude and Longitude cannot be reported in NAD27 must use NAD83. Two pools attached are incorrect please remove these. Only acceptable pool is the Jalmat oil pool.	8/18/2021
pkautz	FATAL ERROR two incorrect pools attached. Only correct pool attached is the Jalmat (OIL) pool. Also GCP as of 05/25/2021 is no longer applicable. Must submit NGMP for APD's submitted on or after 05/25/2021.	8/19/2021
ahvermersch	Fee Cancellation - Payment timed out	8/23/2021
pkautz	REJECTED operator submitted a GCP and has not submitted a NGMP	9/17/2021

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Conditions

Permit 299121

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
GREAT WESTERN DRILLING CO [9338] P.O. Box 1659 Midland, TX 79701	30-025-49479
	Well: URSSEY TANK DARYL STATE #001

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Must submit Deviation Survey with C-104 and C-105
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	Cement is required to circulate on both surface and production strings of casing
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

Multiple String Proposal

Cementing

Company	**GREAT WESTERN DRILLING COMPANY**
Prepared For	**Cary Billingsley**
Well Name	**Urssey Tank Daryl State #1**
UWI Number	
Objective	Provide quality cementing products and services required to achieve the desired top of cement as defined by Great Western Drilling Co.
Service From District	Hobbs
Proposal Number	1
Date	1/22/2020
Primary Contact	Denys Teodoro / 432-301-8073

Schlumberger

Executive Summary

This proposal is in response to your inquiry to secure cementing services for Surface Casing.

The estimated total cost of our services is **$53,184.84**. This proposal/agreement is only a summary of Schlumberger's offerings and any prices provided are for illustrative purposes only. Actual cost will be dependent on time, material and equipment used during the project and any costs associated with unanticipated circumstances. Taxes are not included and all dates and services are dependent on the availability of cementing services and credit approval from Schlumberger's credit department. Attached for your convenience is Schlumberger's Commercial and General Terms and Conditions for your consideration, the final version of which is subject to mutual agreement and management approval before execution.

This proposal shall remain valid for thirty (30) days from the submission date provided above and a minimum notice of twenty four (24) hours prior to a job is required to deliver quoted price(s).

Well Price Estimate Summary

String	Equipment and Services	Materials	Subtotal
9 5/8" Surface	11,911.27	8,240.12	20,151.39
5 1/2" Production	8,708.80	24,324.65	33,033.45
	Well Price Estimate:	**USD**	**53,184.84**

Thank you for considering Schlumberger. Please do not hesitate to contact me with any questions or concerns.

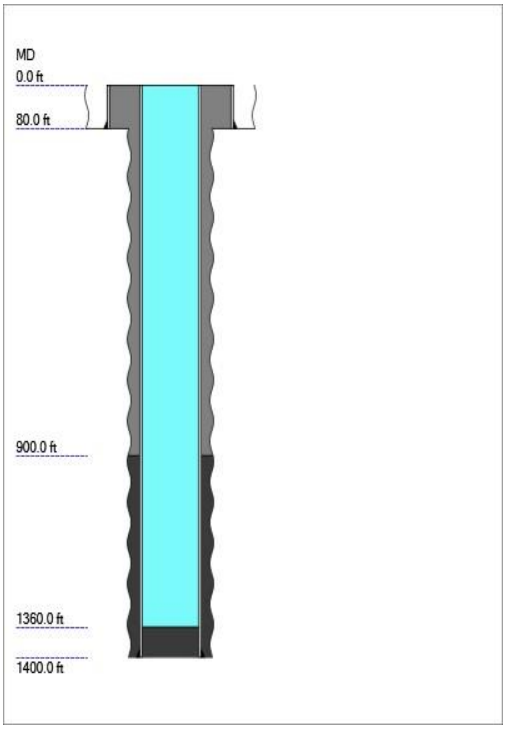
Sincerely,

Denys Teodoro
Cementing Sales Engineer
DTeodoro@slb.com
Office: 432-301-8073

9 5/8 in Surface Casing - Well Data

IMPORTANT

The well data shown on this page is based on information available when this treatment program was prepared. This data must be confirmed on location with the customer representative prior to the treatment. Any changes in the well design need to be reviewed for their impact on the treatment design.



Well Data	
Job Type:	Surface Casing
Total Depth (Measured):	1,400.0 ft
TVD:	1,400.0 ft
BHST (Tubular Bottom Static Temperature):	92.0 degF
BHCT (Tubular Bottom Circulating Temperature):	80.0 degF
Drilling Fluid:	8.90 lb/gal

Open Hole

Excess Type	OH Diameter	MD	Annular Excess	Equiv. OH Diameter	Annular Capacity
Annular	11.000 in	1,400.0 ft	125.0 %	12.508 in	0.062 bbl/ft

Previous Casing

OD, in	Weight, lbm/ft	Grade	Inner Capacity, bbl/ft	Bottom Depth, ft	Casing Capacity, bbl/ft
20	94.0	H-40	0.355	80.0	0.35528

Casing

OD, in	Weight, lbm/ft	Grade	Inner Capacity, bbl/ft	Bottom Depth, ft	Casing Capacity, bbl/ft
9 5/8	36.0	K-55	0.077	1,400.0	0.07731

Annular Capacity (no excess)	
20 in Previous CSG :: 9 5/8 in CSG:	0.265 bbl/ft

Fluid Placement

Fluid Name	Volume, bbl	Top of Fluid, ft	Annular Length, ft	Length, ft	Density, lb/gal
Drilling Fluid	0.0	0.0	0.0	0.0	8.90
FW	20.0	0.0	0.0	0.0	8.32
12.8 ppg Lead	72.1	0.0	900.0	900.0	12.80
14.8 ppg Tail	34.1	900.0	500.0	540.0	14.80
FW	105.1	0.0	0.0	1,360.0	8.32

Total Liquid Volume: 231.3 bbl

9 5/8 in Surface Casing - Fluid Systems

12.8 ppg Lead (243 sacks, 85.0 lbm per sack of Blend)			
System	Conventional		
Density	12.80 lb/gal		
Yield	1.67 ft3/sk		
Mix Water	8.82 gal/sk		
Mix Fluid	8.84 gal/sk		
Total Volume	72.1 bbl		
Additives	**Code**	**Description**	**Concentration**
	D903	Cement	61.14 lb/sk BWOB
	D013	Retarder	0.20 % BWOB
	D035	Extender	23.86 lb/sk BWOB
	D047	Anti Foam	0.02 gal/sk VBWOB
	D079	Extender	1.00 % BWOB

14.8 ppg Tail (145 sacks, 94.0 lbm per sack of Blend)			
System	Conventional		
Density	14.80 lb/gal		
Yield	1.33 ft3/sk		
Mix Water	6.35 gal/sk		
Mix Fluid	6.37 gal/sk		
Total Volume	34.1 bbl		
Additives	**Code**	**Description**	**Concentration**
	D903	Cement	94.00 lb/sk BWOB
	D047	Anti Foam	0.02 gal/sk VBWOB

Some of the chemicals specified in this program may have toxic properties. All personnel should be familiar with the inherent dangers and appropriate safeguards to prevent accidental injury. Use of these chemicals may be governed by certain laws and regulations and should only be used in accordance with such. Please refer to the MSDS for the recommended safety precautions and required minimum personal protective equipment.

9 5/8 in Surface Casing - Pumping Schedule

Fluid Placement						
Fluid	**Flow Rate, bbl/min**	**Volume, bbl**	**Stage Time, min**	**Cumul Volume, bbl**	**Cumul Time, min**	**Comments**
FW	6.0	20.0	3.3	20.0	3.3	
12.8 ppg Lead	6.0	72.1	12.0	92.1	15.3	
14.8 ppg Tail	6.0	34.1	5.7	126.1	21.0	
Top Plug	0.0	0.0	10.0	126.1	31.0	
FW	6.0	85.1	14.2	211.2	45.2	
	2.0	20.0	10.0	231.3	55.2	
		Total Fluid Volume:		**231.3**		
		Total Pump Time:			**55.2**	

9 5/8 in Surface Casing - Price Estimate

Primary Pricebook Code: BY4U

Equipment and Services						
Code	Standard Description	Quantity	Unit List Price	Total List Price $	Discount Rate %	Discounted Price $
107138100	Circulating Equipment before Job	1 EA	1,723.00	1,723.00	30.00	1,206.10
108673977	Surface Pipe Service Surcharge	1 EA	3,500.00	3,500.00	0.00	3,500.00
108673999	Pumps by unit, Casing Cement 0-2000 ft	1 EA	2,757.00	2,757.00	30.00	1,929.90
48019100	Cement Bulk Unit	2 EA	1,380.00	2,760.00	30.00	1,932.00
48601000	Plug Container	1 JOB	640.00	640.00	30.00	448.00
49100000	Cement Service Charge	390 CF	2.80	1,092.00	30.00	764.40
49102000	Cement Transport	603 MI	2.50	1,507.50	30.00	1,055.25
59200002	Equipment Mileage	70 MI	5.91	413.70	30.00	289.59
59200005	Car/PU Mileage	70 MI	3.47	242.90	30.00	170.03
59697004	Job Monitoring	1 JOB	880.00	880.00	30.00	616.00
		Subtotals:	**USD**	**15,516.10**	**USD**	**11,911.27**

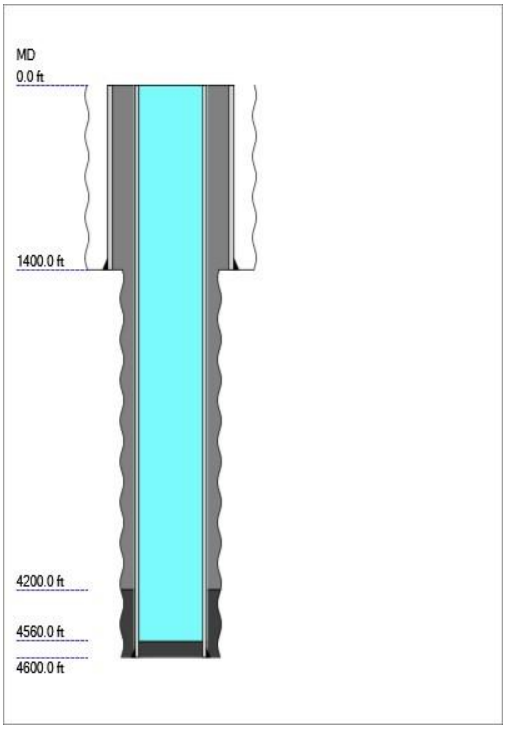
Materials						
Code	Standard Description	Quantity	Unit List Price	Total List Price $	Discount Rate %	Discounted Price $
103047286	Top Plug,Standard,Nitrile,9.625	1 EA	1,194.20	1,194.20	30.00	835.94
D013	D013, Retarder	42 LB	3.30	138.60	30.00	97.02
D035-CF	LITEPOZ 3 Extender	86 CF	12.00	1,032.00	30.00	722.40
D047	D047, Liquid Antifoam Agent	8 GA	82.80	662.40	30.00	463.68
D079	D079, Chemical Extender	207 LB	3.60	745.20	30.00	521.64
D903	D903, Cement Class C (94 lb/ft3)	303 CF	26.40	7,999.20	30.00	5,599.44
		Subtotals:	**USD**	**11,771.60**	**USD**	**8,240.12**

Total List Price:	USD	27,287.70
Applied Discount:	USD	7,136.31
Job Price Estimate:	**USD**	**20,151.39**

5 1/2 in Production Casing - Well Data

IMPORTANT

The well data shown on this page is based on information available when this treatment program was prepared. This data must be confirmed on location with the customer representative prior to the treatment. Any changes in the well design need to be reviewed for their impact on the treatment design.



Well Data

Job Type:	Longstring Casing
Total Depth (Measured):	4,600.0 ft
TVD:	4,600.0 ft
BHST (Tubular Bottom Static Temperature):	117.3 degF
BHCT (Tubular Bottom Circulating Temperature):	105.6 degF
Drilling Fluid:	10.00 lb/gal

Open Hole

Excess Type	OH Diameter	MD	Annular Excess	Equiv. OH Diameter	Annular Capacity
Annular	8.750 in	4,200.0 ft	100.0 %	11.085 in	0.090 bbl/ft
Annular	8.750 in	4,600.0 ft	50.0 %	9.986 in	0.067 bbl/ft

Previous Casing

OD, in	Weight, lbm/ft	Grade	Inner Capacity, bbl/ft	Bottom Depth, ft	Casing Capacity, bbl/ft
9 5/8	36.0	K-55	0.077	1,400.0	0.07731

Casing

OD, in	Weight, lbm/ft	Grade	Inner Capacity, bbl/ft	Bottom Depth, ft	Casing Capacity, bbl/ft
5 1/2	15.5	K-55	0.024	4,600.0	0.02380

Annular Capacity (no excess)

9 5/8 in Previous CSG :: 5 1/2 in CSG:	0.048 bbl/ft

Fluid Placement

Fluid Name	Volume, bbl	Top of Fluid, ft	Annular Length, ft	Length, ft	Density, lb/gal
Drilling Fluid	0.0	0.0	0.0	0.0	10.00
FW	40.0	0.0	0.0	0.0	8.32
11.9 ppg Lead	319.0	0.0	4,200.0	4,200.0	11.90
14.8 ppg Tail	27.9	4,200.0	400.0	440.0	14.80
FW	108.5	0.0	0.0	4,560.0	8.32

Total Liquid Volume: 495.5 bbl

5 1/2 in Production Casing - Fluid Systems

11.9 ppg Lead (759 sacks, 81.0 lbm per sack of Blend)			
System	Conventional		
Density	11.90 lb/gal		
Yield	2.36 ft3/sk		
Mix Water	13.16 gal/sk		
Mix Fluid	13.18 gal/sk		
Total Volume	319.0 bbl		
Additives	**Code**	**Description**	**Concentration**
	D903	Cement	46.97 lb/sk BWOB
	D020	Extender	7.00 % BWOB
	D035	Extender	34.03 lb/sk BWOB
	D044	NaCl	5.00 % BWOW
	D047	Anti Foam	0.02 gal/sk VBWOB
	D154	Extender	10.00 % BWOB
	D208	Viscosifier	0.20 % BWOB

14.8 ppg Tail (119 sacks, 94.0 lbm per sack of Blend)			
System	Conventional		
Density	14.80 lb/gal		
Yield	1.33 ft3/sk		
Mix Water	6.33 gal/sk		
Mix Fluid	6.35 gal/sk		
Total Volume	27.9 bbl		
Additives	**Code**	**Description**	**Concentration**
	D903	Cement	94.00 lb/sk BWOB
	D047	Anti Foam	0.02 gal/sk VBWOB
	D800	Retarder	0.20 % BWOB

Some of the chemicals specified in this program may have toxic properties. All personnel should be familiar with the inherent dangers and appropriate safeguards to prevent accidental injury. Use of these chemicals may be governed by certain laws and regulations and should only be used in accordance with such. Please refer to the MSDS for the recommended safety precautions and required minimum personal protective equipment.

5 1/2 in Production Casing - Pumping Schedule

Fluid Placement						
Fluid	**Flow Rate, bbl/min**	**Volume, bbl**	**Stage Time, min**	**Cumul Volume, bbl**	**Cumul Time, min**	**Comments**
FW	6.0	40.0	6.7	40.0	6.7	
11.9 ppg Lead	6.0	319.0	53.2	359.0	59.8	
14.8 ppg Tail	6.0	27.9	4.7	387.0	64.5	
Pause	0.0	0.0	10.0	387.0	74.5	
FW	6.0	88.5	14.8	475.5	89.2	
	2.0	20.0	10.0	495.5	99.3	
		Total Fluid Volume:		**495.5**		
		Total Pump Time:			**99.3**	

5 1/2 in Production Casing - Price Estimate

Primary Pricebook Code: BY4U

Equipment and Services							
Code	Standard Description	Quantity		Unit List Price	Total List Price $	Discount Rate %	Discounted Price $
102871050	Pumps by unit, Casing Cement 4501-5000 ft	1	EA	3,938.00	3,938.00	50.00	1,969.00
107138100	Circulating Equipment before Job	1	EA	1,723.00	1,723.00	50.00	861.50
48019100	Cement Bulk Unit	1	EA	1,380.00	1,380.00	50.00	690.00
48021000-EA	Silo, Cement	1	EA	915.00	915.00	50.00	457.50
48601000	Plug Container	1	JOB	640.00	640.00	50.00	320.00
49100000	Cement Service Charge	1,339	CF	2.80	3,749.20	50.00	1,874.60
49102000	Cement Transport	1,310	MI	2.50	3,275.00	50.00	1,637.50
59200002	Equipment Mileage	120	MI	5.91	709.20	50.00	354.60
59200005	Car/PU Mileage	60	MI	3.47	208.20	50.00	104.10
59697004	Job Monitoring	1	JOB	880.00	880.00	50.00	440.00
		Subtotals:		**USD**	**17,417.60**	**USD**	**8,708.80**

Materials							
Code	Standard Description	Quantity		Unit List Price	Total List Price $	Discount Rate %	Discounted Price $
103047281	Top Plug,Standard,Nitrile,5.5	1	EA	391.40	391.40	50.00	195.70
D020	D020, Bentonite Extender (60 lb/ft3)	4,304	LB	0.70	3,012.80	50.00	1,506.40
D035-CF	LITEPOZ 3 Extender	380	CF	12.00	4,560.00	50.00	2,280.00
D044	D044, Granulated Sodium Chloride	4,157	LB	0.90	3,741.30	50.00	1,870.65
D047	D047, Liquid Antifoam Agent	18	GA	82.80	1,490.40	50.00	745.20
D154	D154, Extender, low temperature	6,148	LB	2.00	12,296.00	50.00	6,148.00
D208	ScavengerPlus D208	123	LB	80.00	9,840.00	50.00	4,920.00
D800	D800, Mid-Temperature Retarder	23	LB	7.40	170.20	50.00	85.10
D903	D903, Cement Class C (94 lb/ft3)	498	CF	26.40	13,147.20	50.00	6,573.60
		Subtotals:		**USD**	**48,649.30**	**USD**	**24,324.65**

Total List Price:	USD	66,066.90
Applied Discount:	USD	33,033.45
Job Price Estimate:	**USD**	**33,033.45**

CEMENTING Commercial Terms and Conditions– 2019 (2018 Price Book – BYNP)

This pricing agreement is valid for a period of 30 days from the submitted date. These prices are estimates based on the current price structure and will vary somewhat with the actual job design parameters, materials, equipment, and time required at the time of service. Not included are the cost of fluid storage, oil, water, (or transportation thereof) except as listed. Schlumberger does not offer these services.

This proposal and eventual commercial contract ("Agreement") dated January 22, 2020 ("**Effective Date**") is entered into by and between:

Great Western Drilling Co. (referred to hereinafter as "**Company**"); and
SCHLUMBERGER TECHNOLOGY CORPORATION, (referred to hereinafter as "**Contractor**").

Company and Contractor may hereinafter be referred to together as "Parties" and individually as "Party".

The work to be performed under this Agreement shall be governed by the terms and conditions herein and the Master Services Agreement ("**MSA**"), if one is in place between Company and Contractor; otherwise, if no MSA exists, Contractor's General Terms and Conditions ("**GTCs**") shall apply.

Notwithstanding anything to the contrary set forth in the GTCs or MSA and/or any and all existing US land cementing commercial or pricing agreement(s) (as set forth and/or acknowledged in any and all written forms), including any specific commercial provisions therein and any prior amendments thereto, (referred to hereinafter as "Prior Agreement(s)") entered into between Company and Contractor, Company and Contractor acknowledge and agree that this Agreement shall constitute a duly authorized amendment thereto and shall supersede and/or supplement any and all such Prior Agreement(s); and as such the Parties hereto, for and in consideration of the mutual promises, covenants, and agreement herein, do agree as follows:

1. Scope of Work

A. Upon Contractor's acceptance of Company's request for cementing services, Contractor agrees to provide goods, equipment, materials, supplies, labor and supervision for cementing services and associated products ("Services") under the conditions described in the Scope of Work ("SOW") set forth in **Exhibit A** and at the prices set forth in Price Estimate. Contractor further agrees to commence the provision of services on 30 days after Effective Date subject to the terms set forth herein.

B. Company shall provide to Contractor with written approval of job design for the SOW and any modifications thereto at least 72 hours prior to commencing scheduled job. Should Company fail to provide written approval, Contractor shall accept the absence of a response to constitute approval of schedule design.

C. If Company changes the SOW, job design and/or material mix, Contractor reserves the right to adjust the pricing and/or discount offerings in consideration for such changes or decline work without penalty to either Party. Such adjustments to pricing shall be submitted to the Company in a reasonably timely manner prior to a given job and shall be deemed effective upon Contractor mobilizing to such job.

2. Pricing

Prices quoted within this recommendation are valid for cementing services on a ''First Call'' basis only. Quoted discounts are contingent on Schlumberger being awarded all well strings. All ''Second Call'' work will be priced according to market conditions.

- A minimum notice of 24 hours prior to job must be given to ensure quoted price.
- Sales price discount quoted for all cementing treatments are as follows:
  - For primary cementing treatments: Services @ 30%on Surf,50% Prod and Products @ 30% on Surf,50% Prod.
  - For Remedial Cementing, Pump Rentals and associated overtime on these jobs – Services and Products will be POR.
  - Standby Pump(s) will be charged at a base rate of $10,000.00 per unit with 0% discount. SPN 48015000 – Pump, Cement Standby
  - A stage charge is applied to each stage on a multi-stage job at $5,000.00 and with applicable Services discount. SPN 48016000 – Cement Multiple Stage Charge
  - Discounts for proprietary services not specified in this agreement will be negotiated separately as the application needs are identified
  - Discounts are not applicable to items that are listed as 'non-discounted' or 'Price on Request (POR)' in the Pricebook.
- Schlumberger's pricing, terms and discounts set forth in this Proposal shall remain fixed unless commodity costs increase on a month-on-month basis. In the event of such a commodity cost increase, pricing of commodities and any applicable discount offerings are subject to change and Schlumberger's revised pricing will become effective. Schlumberger is committed to providing as much notice as reasonably practical with respect to commodity cost increase.
- "On Location Time" will be calculated from the time the crew and all products/equipment necessary for executing the treatment is requested on location or arrives on location (whichever is later) until the time when the job is completed (such as: bump top plug on primary cementing job) plus 1 hour for rig down operations.
- "Base Charge Time" for equipment and personnel is detailed below. Hourly overtime charges will be applied on any treatments where on location time (as defined above) exceeds base charge time.
  - 6 hrs for treatments with MD < 7,000 ft
  - 8 hrs for treatments with MD > 7,000 ft
  - 4 hr additional base charge time will be added for multi-stage treatments

- Overtime charges will be assessed at the following rates, at 65% discount.
  - $2,900.00 per hour for the first 10 overtime hours, inclusive of all personnel and equipment except for standby pump(s). SPN 102871201
  - $4,500.00 per hour for the 11th through the final overtime hour, inclusive of all personnel and equipment except for standby pump(s). SPN 59225700
  - Standby pump(s) will be charged at a flat rate of $2000.00 per overtime hour. SPN 48015200
- Roundtrip light vehicle miles will be charged for the Supervisor Vehicle with applicable service discount. SPN 59200005
- Roundtrip heavy vehicle miles will be charged per Pump Unit, per plug container delivered larger than 8 5/8", and the number of Silos required with applicable service discount. SPN 59200002
- There will be a Derrick Charge of $700.00 with applicable service discount per job if cement head is greater than 10 feet above the rig floor. SPN 107136000
- Batch mixer to be provided upon Company request and will be charged at a base rate of $4,000.00 discounted at applicable service discount. SPN 102887050
- Circulating equipment, if delivered before the job, will be charged at $1,800.00 with the below discounts. In addition, Light Vehicle (F150) SPN 59200005 or Heavy Vehicle (F550) SPN 59200002 mileage charges will apply dependent on the delivery mode to location.
  - 50% Discount: When only a swedge and valve is requested
  - 0% Discount: When more than a swedge and valve is requested (including an iron rack with bails/loops)
- When used at client request, dye will be charged as a miscellaneous service at $100.00 per job. SPN 58498000
- Environmental Containment can be provided at price on request (POR).
- Lab testing:
  - Pilot Blend Testing – Schlumberger will provide representative pilot blend testing on each blend, Tests include: thickening time, rheology, free fluid, fluid loss (only when FLAC is present in design), and UCA.
  - Field Blend Testing – Schlumberger will provide representative sample testing per total volume of cement blend system. Tests include: thickening time, rheology & spacer/mud compatibility when non-aqueous drilling fluids are used.
  - Additional Testing requested on pilot blend and/or field blend tests will be priced separately upon request.
- A high-pressure cement head will be used for pressures greater than 5,000 psi up to 10,000 psi at a rate of $1,000.00. This will replace the low-pressure cement head charge
- Any 3rd party services requested and called out by Schlumberger will be subject to actual costs + 15% non-discountable handling fee.
- For an incomplete service, that is, the Crew, Equipment and Materials are mobilized to location and are released by Company prior to completing the service, the charges in the table below will be applied at 65% discount. The same overtime rules and associated charges as defined above will apply in these cases.
- If materials are blended in preparation for the job after which the job is cancelled by Company for any reason, the charge in the table below, at 65% discount, will only be applied if a crew had been dispatched to location prior to the cancellation. In addition, all materials that had been mobilized will be subject to round trip ton mile charges. All cement that had been blended for the cancelled job (whether mobilized or not) will be charged at bid price with the single exception of neat cement (cement that has not been blended with any other dry additives) which will instead be subjected to a 15% restocking fee.

SPN	Description	Unit Price
108671314	Early Cancellation Charge Per Crew	$38,000.00

3. Mobilization and Demobilization

A. **Mobilization/Demobilization Locations.** The point of mobilization and demobilization is Schlumberger's Cementing base in *Hobbs, NM.* All mileages and associated charges will be calculated from this point to the wellsite.

Schlumberger

Laboratory Cement Test Report
Chevron – 11.9 ppg Intermediate
Stage 2 Lead Pilot Blend

LAR Name	: MIX 2019-2806	Client	: Chevron	Location	: Midland
Date	: Oct-04-2019	Well Name	: Generic	Rig	: Nabors X48
String	: Intermediate				

Signatures

Report created by: Reginald Oxley

Design input by: Ariel Nava

Job Type	: Primary	MD	: 4,688.00 ft	TVD	: 4,623.60 ft
BHST	: 119.00 °F	BHCT	: 105.00 °F	BHP	: 3,100.00 psi
Starting Temp	: 80.00 °F	Time To Temp	: 00:40 hr:mn	Heating Rate	: 0.62 °F/min
Starting Pressure	: 500.00 psi	Time To Pressure	: 00:40 hr:mn		

Composition

Slurry Density	: 11.90 lb/gal	Yield	: 2.49 ft³/sk of blend	Mix Fluid	: 14.115 gal/sk of blend
Solid Vol. Fraction	: 23.04 %	Slurry Type	: Lead	Mix Water	: 14.095 gal/sk of blend

Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
C	50.00 % BVOB	Blend sack: 84 lb	Cement	176.05 lb/ft³	Bulk
D035	50.00 % BVOB		Extender		Bulk
D047	0.020 gal/sk VBWOB		Anti Foam		D009J4LL89
D020	7.00 % BWOB		Extender		Bulk
D154	10.00 % BWOB		Extender		Bulk
D208	0.20 % BWOB		Viscosifier		D3276W
Fresh Water	14.095 gal/sk of blend		Base Fluid		Tap
D044	5.00 % BWOW		NaCl		82619

Rheology

S/N: XXX5				S/N: XXX5			
Surface (Configuration: R1B1 F1.0)				Downhole (Configuration: R1B1 F1.0)			
Temperature	80 °F			Temperature	105 °F		
(rpm)	Up (deg)	Down (deg)	Average (deg)	(rpm)	Up (deg)	Down (deg)	Average (deg)
600	90	90	90	600	80	80	80
300	68	68	68	300	60	60	60
200	60	56	58	200	52	48	50
100	50	40	45	100	44	36	40
60	44	34	39	60	34	30	32
30	40	30	35	30	28	24	26
20	38	30	34	20	24	20	22
10	36	26	31	10	20	18	19
6	30	26	28	6	18	16	17
3	22	20	21	3	14	16	15
10 sec Gel	20 deg - 21.29 lbf/100ft²			10 sec Gel	16 deg - 17.03 lbf/100ft²		
10 min Gel	40 deg - 42.58 lbf/100ft²			10 min Gel	32 deg - 34.06 lbf/100ft²		
Rheo. computed	PV: 32 cP, Ty: 30.77 lbf/100ft²			Rheo. computed	PV: 32.2 cP, Ty: 21.85 lbf/100ft²		

Conditioned at 105.00 °F and BHP pressure for 30 mins after reaching temperature
All reading taken with F2 Spring, doubled, and calculated/ reported as F1 spring per Chevron Testing Procedure

Thickening Time S/N:

Set Conditions – Thick (gelled)

Consistency	Time	Temp
POD Time	07:25 hr:mn	105 °F
30 Bc	07:25 hr:mn	105 °F
50 Bc	07:25 hr:mn	105 °F
70 Bc	07:25 hr:mn	105 °F

Free Fluid

(0.2%) 0.5 / 250mL in 2 hrs
At 80 °F and 45 deg inclination
Conditioned at 105.00 °F and 3,100.00 psi for 30 mins after reaching temperature
Sedimentation: None

Schlumberger

UCA S/N: 944L

Time	CS	Temp
08:46 hr:mn	50 psi	119 °F
11:52 hr:mn	100psi	119 °F
24:00 hr:mn	325psi	119 °F
33:13 hr:mn	500psi	119 °F
72:00 hr:mn	747psi	119 °F

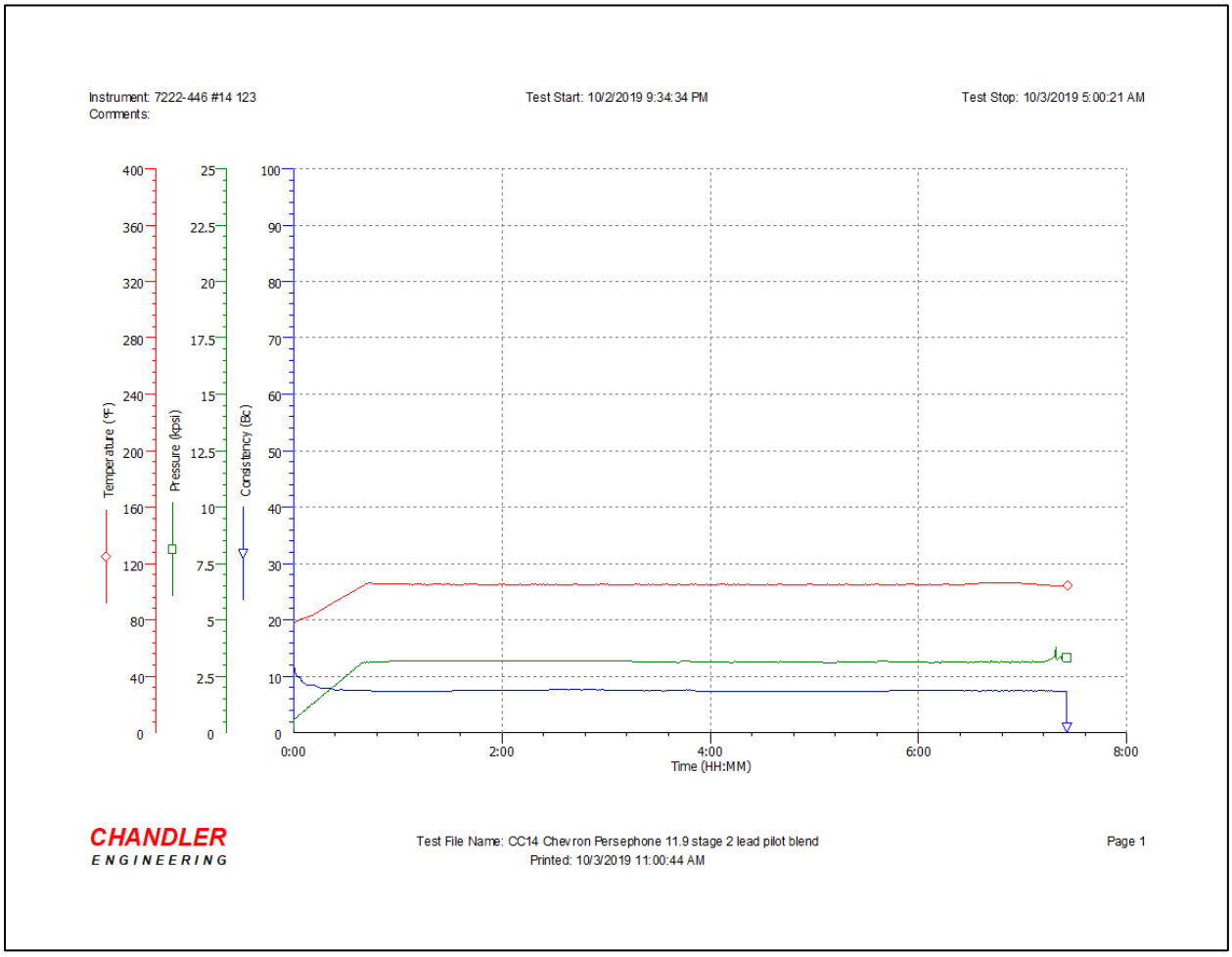
Comments

All slurries prepared and tested in accordance with API RP 10B-2 unless otherwise noted

Time to Add Solids : 00:18 mn:sc

Vortex Quality: good/visible
Motor Paused: 01:00 at 06:25 hr:mn
Pin Sheered

Thickening Time Graph



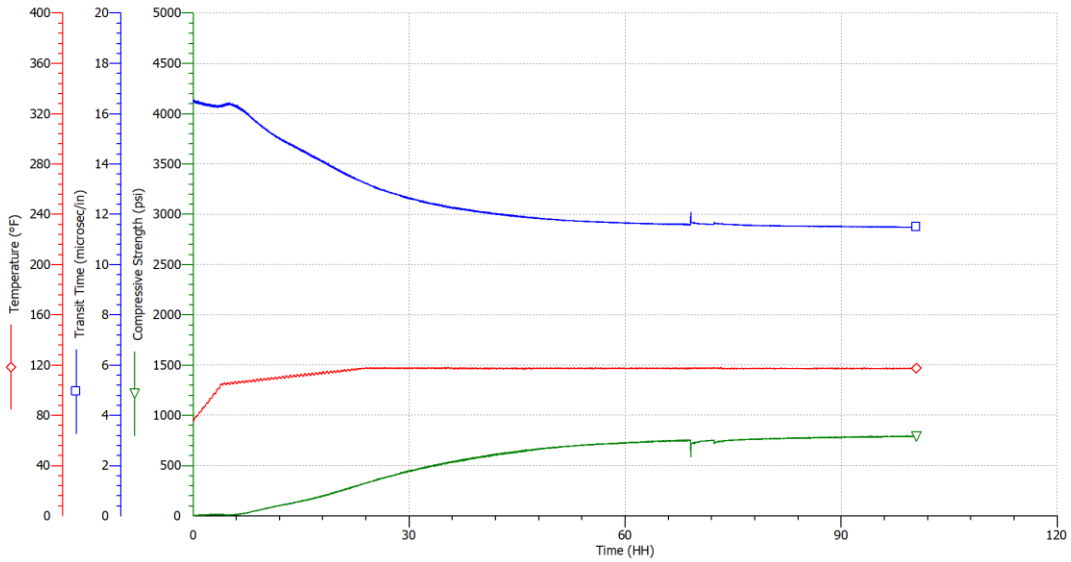
Schlumberger

UCA Graph

BHST: 119 BHCT: 105
Density: 11.9
Intrument: UCA 0 S/N 944
Additives: 7 D020+ 10 D154+ .2 D208+ 5 D044

Algorithm: Compressive strength type A (less than 14 lb/gal)

50 psi @ 8:46:30
500 psi @ 33:13:00
24hr: 325 psi
72hr: 747 psi



SCHLUMBERGER
Midland, TX District Laboratory

Schlumberger

Laboratory Cement Test Report
West Texas Standard Systems
Surface 12.8 ppg Lead Pilot Blend

LAR Name	: MIX 2019-2047	Client	: West Texas Standard Systems	Location	: Midland
Date	: Nov-05-2019	Well Name	: Surface	Rig	: WTX
String	: Surface				

Signatures

Report created by: Reginald Oxley

Design input by: Wendy Dean

Job Type	: Primary	MD	: 2,500.00 ft	TVD	: 2,500.00 ft
BHST	: 90.00 °F	BHCT	: 90.00 °F	BHP	: 1,000.00 psi
Starting Temp	: 80.00 °F	Time To Temp	: 00:15 hr:mn	Heating Rate	: 0.67 °F/min
Starting Pressure	: 500.00 psi	Time To Pressure	: 00:15 hr:mn		

Composition

Slurry Density	: 12.80 lb/gal	Yield	: 1.65 ft³/sk of blend	Mix Fluid	: 8.737 gal/sk of blend
Solid Vol. Fraction	: 28.61 %	Slurry Type	: Lead	Mix Water	: 8.717 gal/sk of blend

Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
C	65.00 % BVOB	Blend sack: 84 lb	Cement	178.27 lb/ft³	Bulk
B-D035-68	35.00 % BVOB		Extender		Bulk
D079	1.00 % BWOB		Extender		112003
D047	0.020 gal/sk VBWOB		Anti Foam		D009J15L64
D013	0.20 % BWOB		Retarder		10K-11
Fresh Water	8.717 gal/sk of blend		Base Fluid		Tap

Rheology

S/N: 1044				S/N: 1044			
Surface (Configuration: R1B1 F1.0)				Downhole (Configuration: R1B1 F1.0)			
Temperature	80 °F			Temperature	90 °F		
(rpm)	Up (deg)	Down (deg)	Average (deg)	(rpm)	Up (deg)	Down (deg)	Average (deg)
300	35	35	35	300	39	39	39
200	31	32	31.5	200	34	36	35
100	28	28	28	100	30	32	31
60	25	26	25.5	60	28	28	28
30	24	20	22	30	27	25	26
6	23	18	20.5	6	25	22	23.5
3	13	15	14	3	16	15	15.5
10 sec Gel	12 deg - 12.77 lbf/100ft²			10 sec Gel	16 deg - 17.03 lbf/100ft²		
10 min Gel	18 deg - 19.16 lbf/100ft²			10 min Gel	22 deg - 23.42 lbf/100ft²		
Rheo. computed	PV: 16.9 cP, Ty: 19.69 lbf/100ft²			Rheo. computed	PV: 18.2 cP, Ty: 22.35 lbf/100ft²		
Conditioned at 90.00 °F and atmospheric pressure for 30 mins after reaching temperature							

Thickening Time S/N: 718

Set Conditions – Thick (gelled)

Consistency	Time	Temp
POD Time	02:43 hr:mn	90 °F
30 Bc	03:47 hr:mn	90 °F
50 Bc	04:21 hr:mn	90 °F
70 Bc	04:57 hr:mn	90 °F

Free Fluid

(0.6%) 1.5 / 250mL in 2 hrs
At 80 °F and 0 deg inclination
Conditioned at 90.00 °F for 30 mins after reaching temperature
Sedimentation: None

UCA S/N:

UPDATE ME WITH UCA DATA

Time	CS	Temp
00:00 hr:mn	0 psi	90 °F
00:00 hr:mn	0 psi	90 °F
00:00 hr:mn	0 psi	90 °F
00:00 hr:mn	0 psi	90 °F

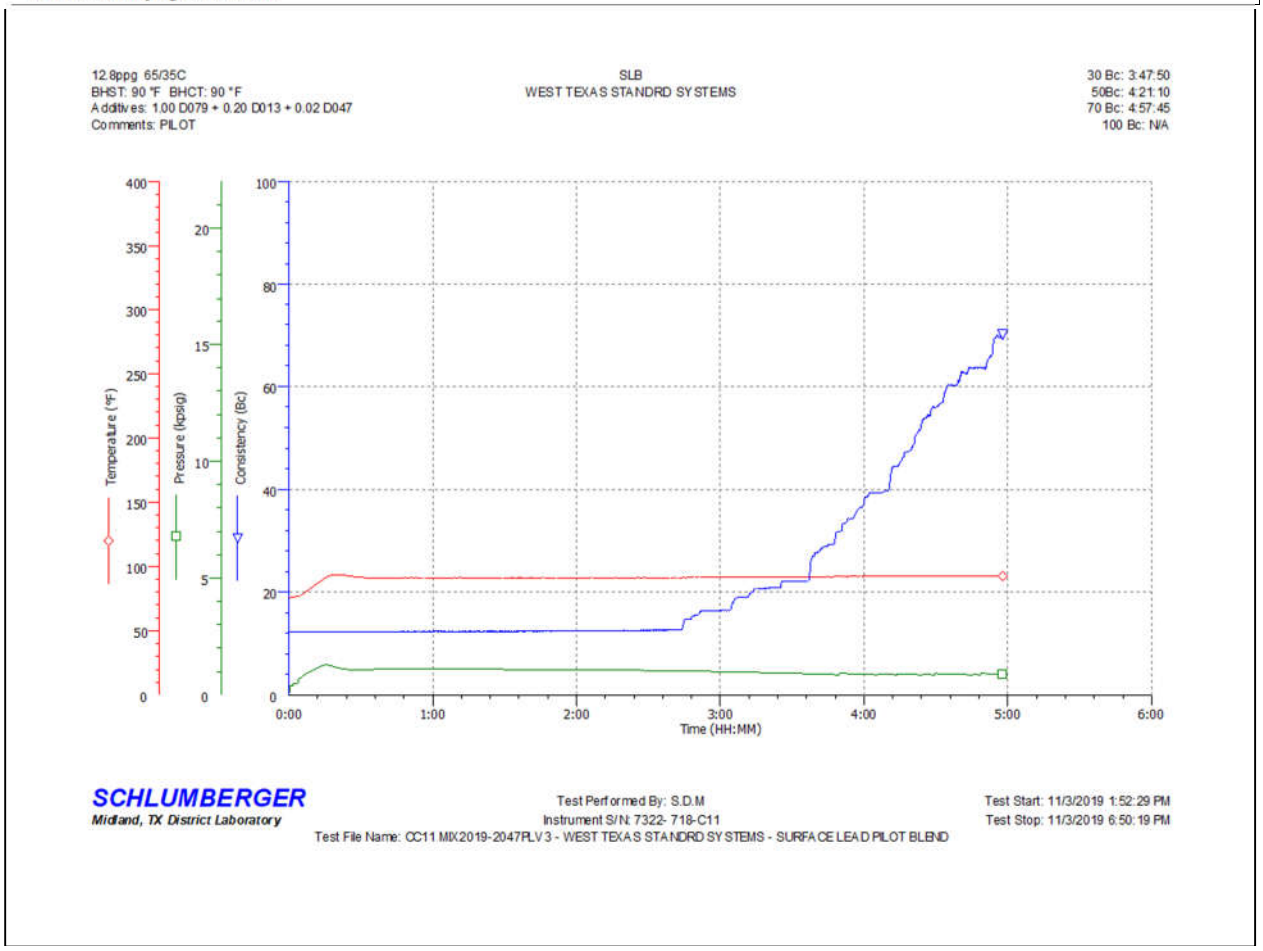
Schlumberger

Mud Balance

Slurry Density Verified by Pressurized Fluid Balance: 12.7 lb/gal

Comments

All slurries prepared and tested in accordance with API RP 10B-2 unless otherwise noted
Time to Add Solids : 00:17 mn:sc
Vortex Quality: good/visible



Schlumberger

Laboratory Cement Test Report
MIX 2019-2047-West Texas Standard Systems-Sur-PB 14.8 Tail

LAR Name	: MIX 2019-2047	Client	: West Texas Standard Systems	Location	: Midland
Date	: Nov-30-2019	Well Name	: Surface	Rig	: WTX
String	: Surface				

Signatures

Report created by: Pete Pappas
Design input by: Wendy Dean

Job Type	: Primary	MD	: 2,500.00 ft	TVD	: 2,500.00 ft
BHST	: 90.00 °F	BHCT	: 90.00 °F	BHP	: 1,000.00 psi
Starting Temp	: 80.00 °F	Time To Temp	: 00:15 hr:mn	Heating Rate	: 0.67 °F/min
Starting Pressure	: 500.00 psi	Time To Pressure	: 00:15 hr:mn		

Composition

Slurry Density	: 14.80 lb/gal	Yield	: 1.33 ft³/sk of blend	Mix Fluid	: 6.365 gal/sk of blend
Solid Vol. Fraction	: 35.90 %	Slurry Type	: Tail	Mix Water	: 6.365 gal/sk of blend

Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
D903	100.00 % BVOB	Blend sack: 94 lb	Cement	197.28 lb/ft³	Bulk
Tap Water	6.365 gal/sk of blend		Base Fluid		Tap

Rheology

S/N: 383				S/N: 383			
Surface (Configuration: R1B1 F1.0)				Downhole (Configuration: R1B1 F1.0)			
Temperature	70 °F			Temperature	90 °F		
(rpm)	Up (deg)	Down (deg)	Average (deg)	(rpm)	Up (deg)	Down (deg)	Average (deg)
300	51	51	51	300	68	68	68
200	43	43	43	200	60	59	59.5
100	34	34	34	100	50	48	49
60	29	30	29.5	60	44	43	43.5
30	25	27	26	30	38	38	38
6	16	20	18	6	19	20	19.5
3	13	15	14	3	14	15	14.5
10 sec Gel	19 deg - 20.22 lbf/100ft²			10 sec Gel	15 deg - 15.97 lbf/100ft²		
10 min Gel	21 deg - 22.35 lbf/100ft²			10 min Gel	18 deg - 19.16 lbf/100ft²		
Rheo. computed	PV: 33.6 cP, Ty: 19.61 lbf/100ft²			Rheo. computed	PV: 47.3 cP, Ty: 26.01 lbf/100ft²		
Conditioned at 90.00 °F and atmospheric pressure for 30 mins after reaching temperature							

Thickening Time S/N: 143

Set Conditions – Thick Gelled

Consistency	Time	Temp
POD Time	02:38 hr:mn	90 °F
30 Bc	03:02 hr:mn	90 °F
50 Bc	03:58 hr:mn	90 °F
70 Bc	04:35 hr:mn	90 °F

Free Fluid

(0.8%) 2 / 250mL in 2 hrs.
At 90 °F and 0 deg inclination
Conditioned at 90.00 °F at ATM psi for 30 mins after reaching temperature
Sedimentation: None
Tube Dimensions: 250mL: 35 mm X 245 mm

Mud Balance S/N: 860210

Slurry Density Verified by Pressurized Fluid Balance: 14.80 lb/gal

Schlumberger

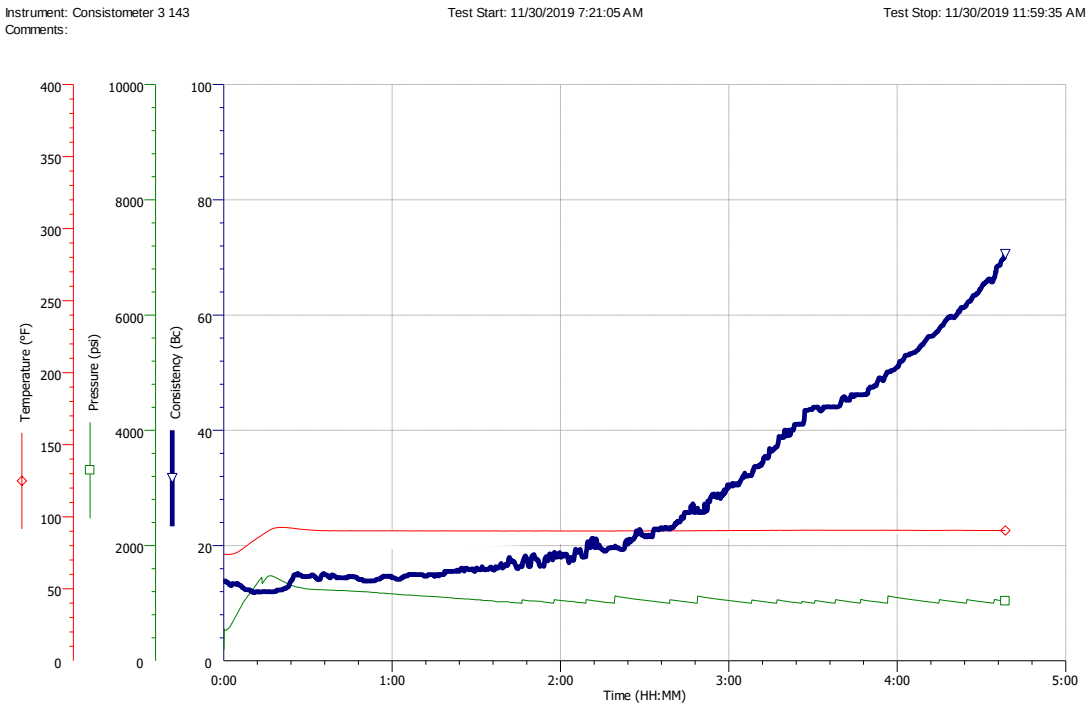
Comments

All slurries prepared and tested in accordance with API RP 10B-2 unless otherwise noted

Time to Add Solids : 00:15 mn:sc

Vortex Quality: good/visible

Thickening Time Graph



Schlumberger

Laboratory Cement Test Report
MIX 2019-2334-West Texas Standard Systems-Inter-PB Stg2 14.8 Tail

LAR Name	: MIX 2019-2334	Client	: West Texas Standard Systems	Location	: Midland
Date	: Dec-02-2019	Well Name	: Inter. Stg. 2 Tail	Rig	: WTX
String	: Intermediate				

Signatures

Report created by:
Rudy Bejarano

Design input by:
Wendy Dean

Job Type	: Primary	MD	: 7,000.00 ft	TVD	: 7,000.00 ft
BHST	: 115.00 °F	BHCT	: 110.00 °F	BHP	: 3,250.00 psi
Starting Temp	: 80.00 °F	Time To Temp	: 00:50 hr:mn	Heating Rate	: 0.60 °F/min
Starting Pressure	: 500.00 psi	Time To Pressure	: 00:50 hr:mn		

Composition

Slurry Density	: 14.80 lb/gal	Yield	: 1.33 ft³/sk of blend	Mix Fluid	: 6.353 gal/sk of blend
Solid Vol. Fraction	: 35.88 %	Slurry Type	: Tail	Mix Water	: 6.353 gal/sk of blend

Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
D903	100.00 % BVOB	Blend sack: 94 lb	Cement	197.28 lb/ft³	Bulk
D800	0.20 % BWOB		Retarder		1190031
Tap Water	6.353 gal/sk of blend		Base Fluid		Tap

Rheology

S/N: 383				S/N: 383			
Surface (Configuration: R1B1 F1.0)				Downhole (Configuration: R1B1 F1.0)			
Temperature	70 °F			Temperature	110 °F		
(rpm)	Up (deg)	Down (deg)	Average (deg)	(rpm)	Up (deg)	Down (deg)	Average (deg)
300	24	24	24	300	82	82	82
200	19	19	19	200	68	66	67
100	14	14	14	100	51	50	50.5
60	12	12	12	60	42	42	42
30	10	10	10	30	34	35	34.5
6	8	8	8	6	18	21	19.5
3	6	7	6.5	3	13	15	14
10 sec Gel	10 deg - 10.64 lbf/100ft²			10 sec Gel	17 deg - 18.1 lbf/100ft²		
10 min Gel	60 deg - 63.87 lbf/100ft²			10 min Gel	22 deg - 23.42 lbf/100ft²		
Rheo. computed	PV: 16.5 cP, Ty: 7.84 lbf/100ft²			Rheo. computed	PV: 63.3 cP, Ty: 23.12 lbf/100ft²		
Conditioned at 110.00 °F and atmospheric pressure for 30 mins after reaching temperature							

Thickening Time S/N: 756

Set Conditions - Thick Gelled

Consistency	Time	Temp
POD Time	05:50 hr:mn	110 °F
30 Bc	02:58 hr:mn	110 °F
50 Bc	03:10 hr:mn	110 °F
70 Bc	03:40 hr:mn	110 °F

Free Fluid

(0.8%) 2 / 250mL in 2 hrs.
At 110 °F and 0 deg inclination
Conditioned at 110.00 °F at ATM psi for 30 mins after reaching temperature
Sedimentation: None
Tube Dimensions: 250mL: 35 mm X 245 mm

Mud Balance S/N: 860210

Slurry Density Verified by Pressurized Fluid Balance: 14.80 lb/gal

Schlumberger

UCA Compressive Strength S/N: 308-R

Time	CS	Temp
01:50 hr:mn	50 psi	**110 degF**
03:56 hr:mn	500 psi	**110 degF**
24:00 hr:mn	1857 psi	**110 degF**
72:00 hr:mn	2082 psi	**110 degF**

UCA Compressive Strength S/N: 308-L

Time	CS	Temp
01:34 hr:mn	50 psi	**140 degF**
03:24 hr:mn	500 psi	**140 degF**
24:00 hr:mn	1907 psi	**140 degF**
72:00 hr:mn	1970 psi	**140 degF**

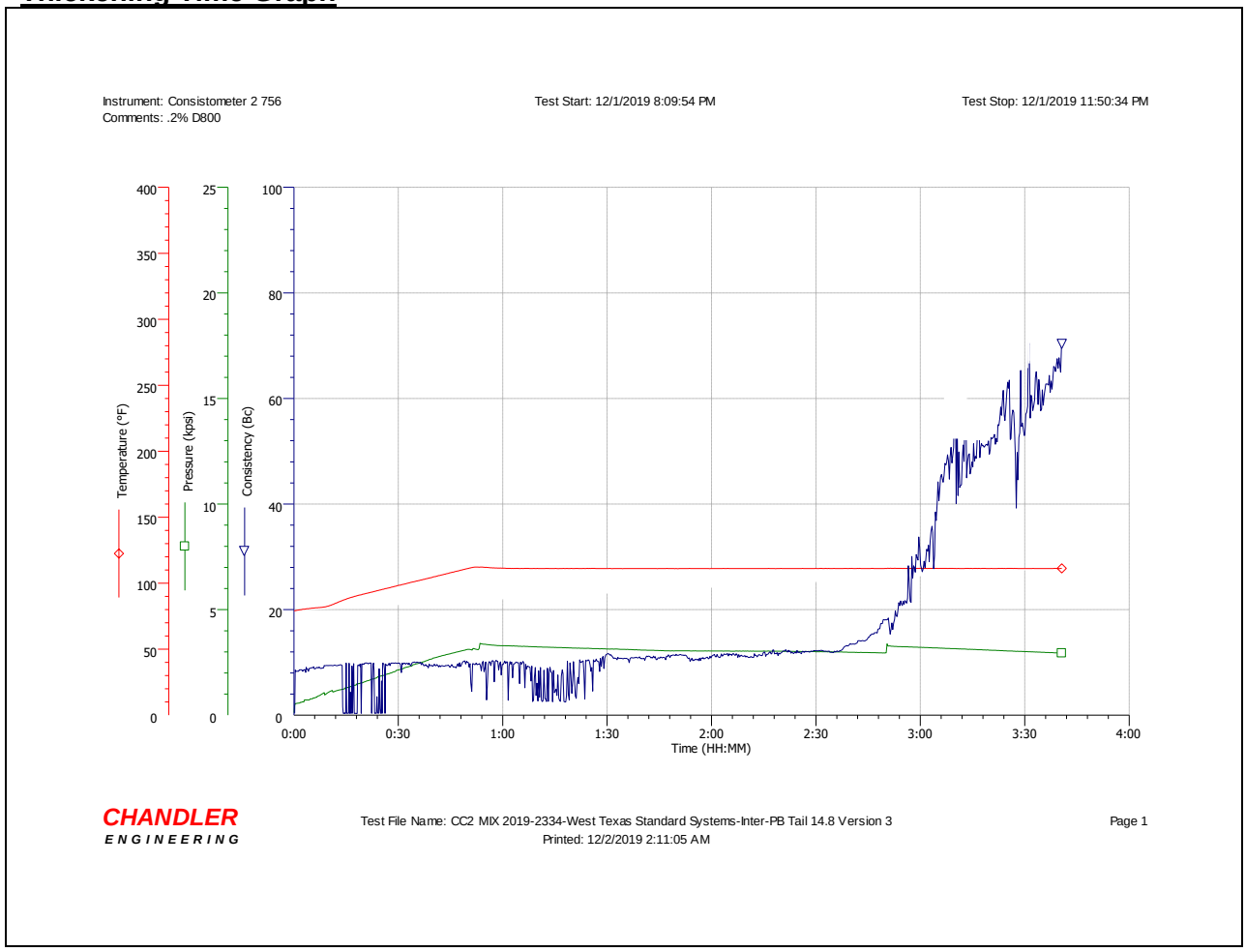
Comments

All slurries prepared and tested in accordance with API RP 10B-2 unless otherwise noted

Time to Add Solids: 00:15 mn:sc

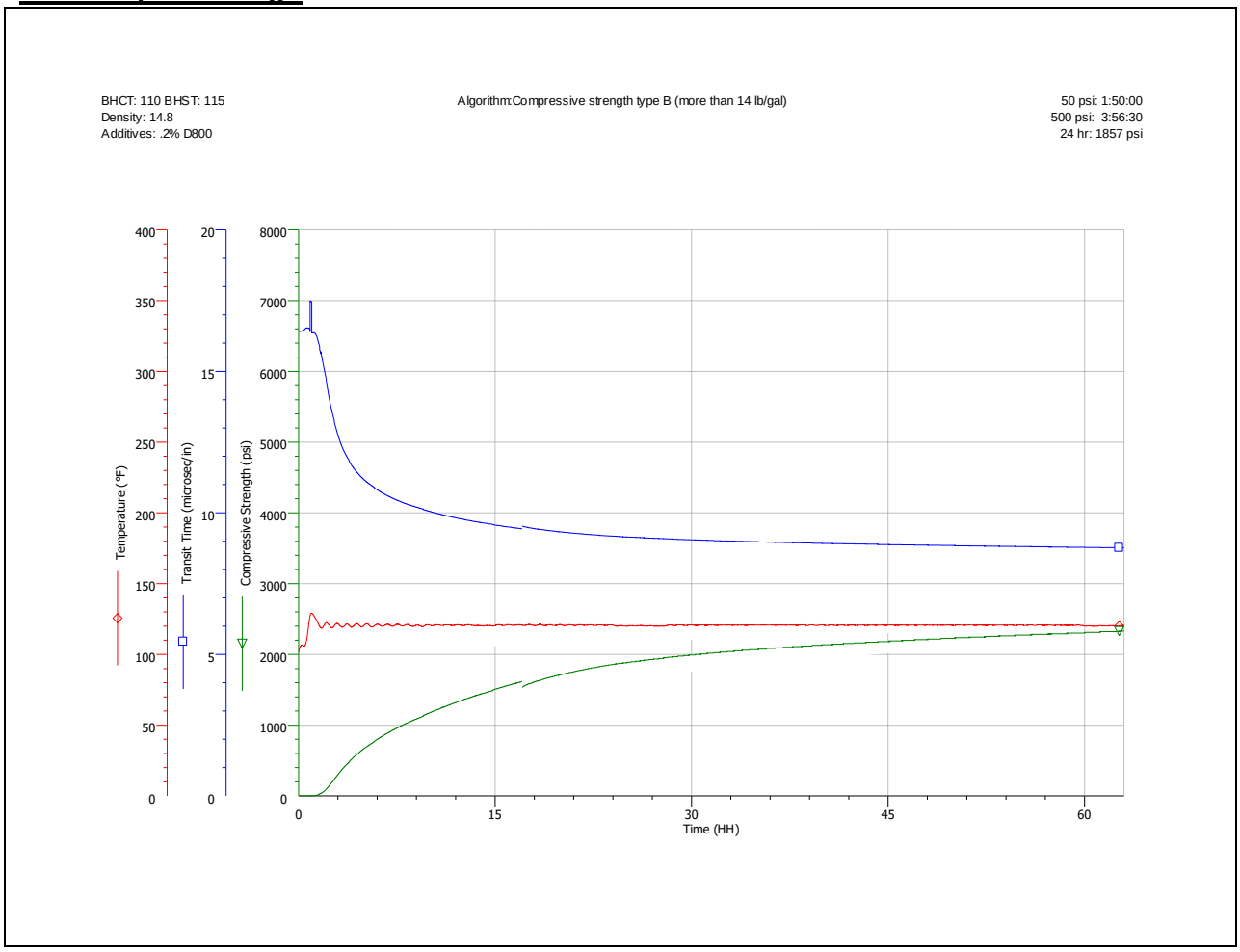
Vortex Quality: good/visible

Thickening Time Graph



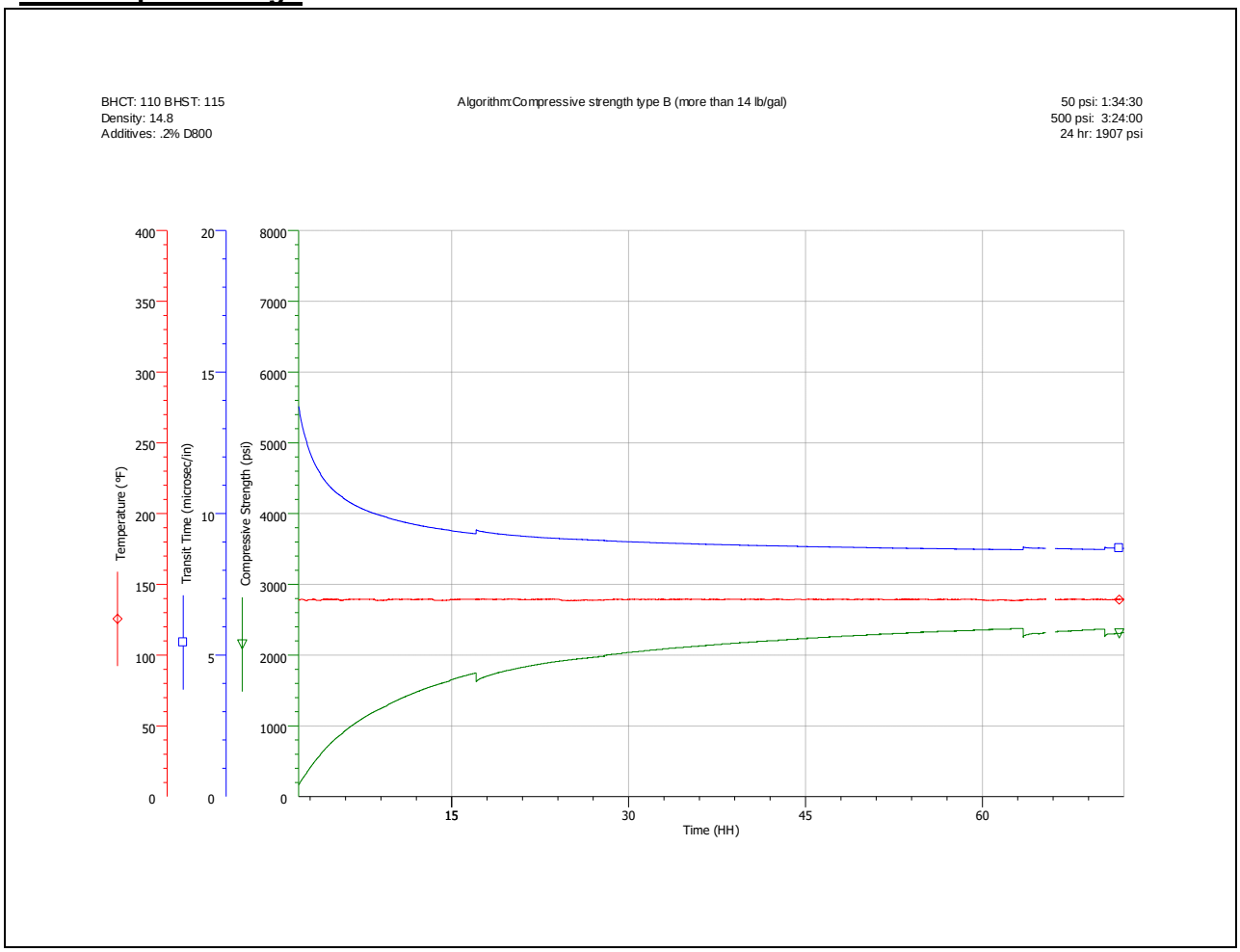
Schlumberger

UCA Graph 110 degF



Schlumberger

UCA Graph 140 degF



State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: *Great Western Drilling Company* **OGRID:** *9338* **Date:** *10/4/2021*

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
URSSEY TANK		*A-36-21S-35E*	*660 N*		*250*	*100*
DARYL STATE #001			*990 E*			

IV. Central Delivery Point Name: *TARGA MIDSTREAM SERVICES LLC* [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
URSSEY TANK		12/1/2021	12/15/2021	1/15/2022	2/1/2021	2/1/2022
DARYL STATE #001						

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF
URSSEY TANK		250	36,500
DARYL STATE #001			

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in
GREAT WESTERN DRILLING COMPANY	*TARGA MIDSTREAM SERVICES LLC*	A-31-21S-36E	2/1/2022	2 MMCFPD

XI. Map. ☒ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☒ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☒ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications
Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

(a) power generation on lease;
(b) power generation for grid;
(c) compression on lease;
(d) liquids removal on lease;
(e) reinjection for underground storage;
(f) reinjection for temporary storage;
(g) reinjection for enhanced oil recovery;
(h) fuel cell production; and
(i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	Cary N. Billingsley
Printed Name:	*CARY N. BILLINGSLEY*
Title:	*SR AREA ENGINEER*
E-mail Address:	*cbillingsley@gwdc.com*
Date:	10/6/2021
Phone:	*432-682-5241*

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

URSSEY TANK DARYL STATE #1 NGMP ADDITIONAL INFORMATION

Section 1 – Plan Description

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

The Operator would size a separator per ASME Section VIII Division I, utilize API 12J as a guideline, and supplement these documents with standard industry practices and experience with similar process equipment.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

Operator agrees to:

- Provide operator training with special emphasis on produced gas conservation and flare/vent minimization
- Vent or flare gas only at times stipulated by Subsections A-D.
- Design the Production Facility in accordance with Subsection E utilizing a qualified Engineer
- Provide the metering requirements, as part of the design of the facility, in accordance with Subsection F.
- Develop procedures for immediate incident reporting and record-keeping complying with 19.15.27.8 NMAC Subsection G

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Operator's best management practices to minimize venting during active and planned maintenance to include:

- Procedures to curtail or shut-in production
- Incorporate manual bypasses around equipment expected to require frequent maintenance with operator training on how to utilize the bypasses to conserve produced gas.
- Procedures to safely increase tie-in pipeline pressure to MAWP during Gas Purchaser's maintenance activities before releasing gas to vent/flare.
- Identify back-up Gas Purchaser during the planning phase of the Gas Purchaser's maintenance work.
- Consider including a blowdown vessel (or tank) that could reduce pressure and send the flow to a gas recovery device.

Section 2 – Enhanced Plan

XI. Map. Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gather system(s) to which the well(s) will be connected.

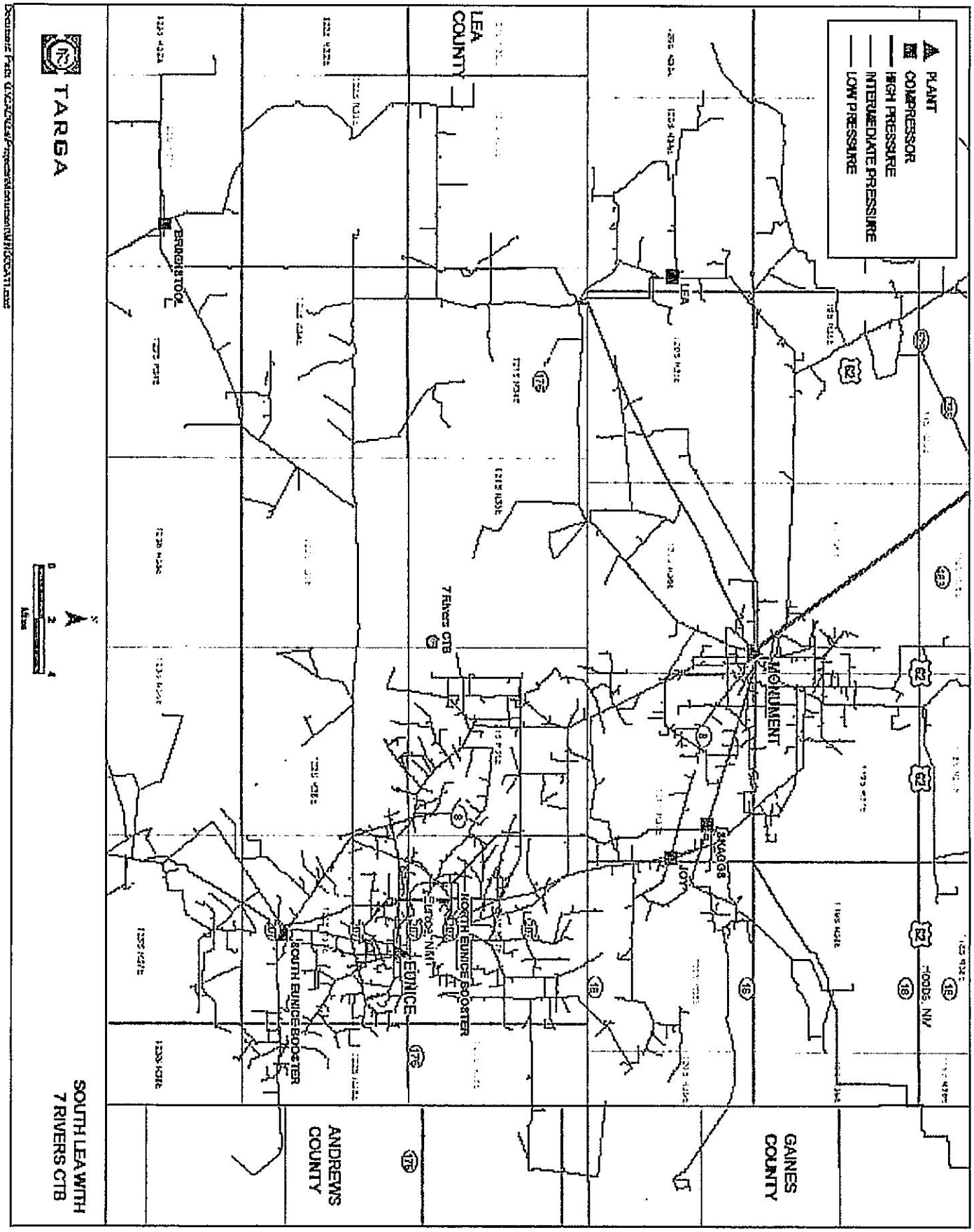
The attached map shows the TARGA gathering lines earmarked in green just east of the tank battery location, and are the closest pipelines to the potential production operations location. They are 4" in diameter and their maximum daily capacity is in the 1-2,MMcfd range depending on line pressure.

XII. Line Capacity:

The natural gas gathering system will have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of production.

XIII. Line Pressure.

Operator does anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressures caused by the new well(s).


PLANT
COMPRESSOR
HIGH PRESSURE
INTERMEDIATE PRESSURE
LOW PRESSURE
LEA COUNTY
ANDREWS COUNTY
GAINES COUNTY
ERRERA TOOL
LEA
MONUMENT
EUNICE
SOUTH EUNICE BOOSTER
ROCKY EUNICE BOOSTER
7 Rivers CTB
TARGA
SOUTH LEA WITH
7 RIVERS CTB

Caballo Loco midstream Crazy Horse, High Energy People

GREAT WESTERN DRILLING COMPANY

September 2021

Summary:
Caballo Loco Midstream has been requested to provide guidance and assistance with New Mexico Oil Conservation Division (NMOCD)'s request to complete the Natural Gas Management Plan (NGMP) and file an application to request a permit to drill the Urssey Tank Daryl State #1 well in Lea, NM.

Caballo Loco also solicited further support to Great Western's request by engaging the following engineering consulting firm:

PERC

Section 1 - Plan Description:
The information provided below pertains to the NGMP; parts VI, VII, VIII.

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.
The Operator would size a separator per ASME Section VIII Division I, utilize API 12J as a guideline, and supplement these documents with standard industry practices and experience with similar process equipment.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.
Operator agrees to:

- Provide operator training with special emphasis on produced gas conservation and flare/vent minimization
- Vent or flare gas only at times stipulated by Subsections A-D.
- Design the Production Facility in accordance with Subsection E utilizing a qualified Engineer
- Provide the metering requirements, as part of the design of the facility, in accordance with Subsection F.
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Caballo Loco midstream Crazy Horse, High Energy People

Cont.

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- Identify back-up Gas Purchaser during the planning phase of the Gas Purchaser's maintenance work.
- Consider including a blowdown vessel (or tank) that could reduce pressure and send the flow to a gas recovery device.

Section 2 – Enhanced Plan:

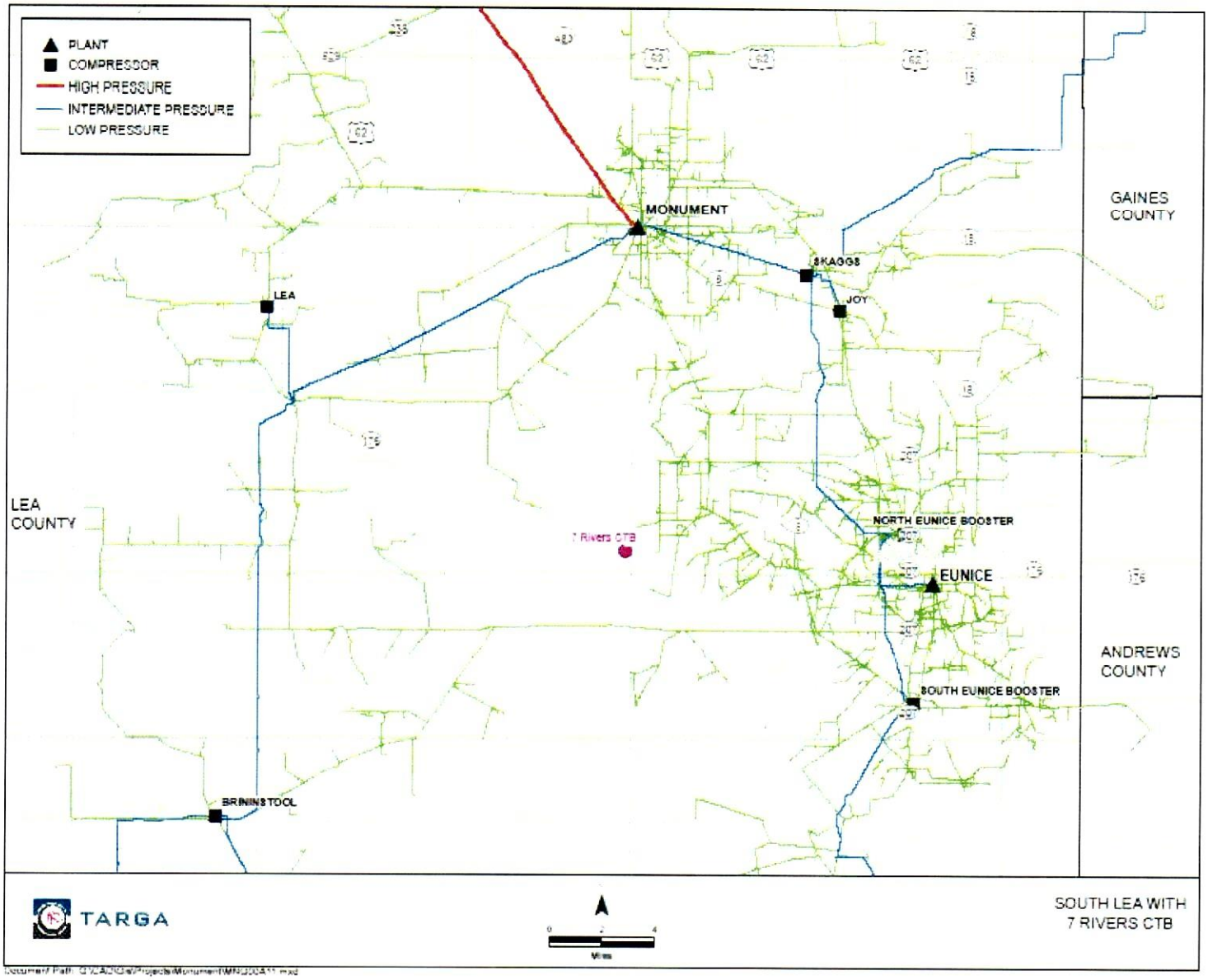
The information provided below pertains to the NGMP; parts XI, XII, XIII.

XI. Map. Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gather system(s) to which the well(s) will be connected.

The gathering lines earmarked in green just east of the tank battery location are the closest pipelines to the potential production operations location. They are 4" in diameter and their maximum daily capacity is in the 1-2.MMcfd range depending on line pressure.

Caballo Loco midstream
Crazy Horse, High Energy People

Cont.



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