

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

Energy, Minerals and Natural Resources

Revised July 18, 2013

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

WELL API NO.

30-005-64388

5. Indicate Type of Lease

STATE ☐ FEE ☐

Federal

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Fraser SWD

8. Well Number 1

9. OGRID Number 013837

10. Pool name or Wildcat
SWD Devonian**SUNDRY NOTICES AND REPORTS ON WELLS**

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
 DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH
 PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other SWD2. Name of Operator
Mack Energy Corporation3. Address of Operator
PO Box 960 Artesia, NM 88211-0960

4. Well Location

Unit Letter N 330 feet from the South line and 1550 feet from the West line
 Section 25 Township 15S Range 28E NMPM County Chaves

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
 3581 GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data**NOTICE OF INTENTION TO:**

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐
 CLOSED-LOOP SYSTEM ☐
 OTHER: Step Rate Test ☒ X

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐
 OTHER: ☐

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.

Step Rate Test Procedure

1. Notify NMOCD of plan to perform SRT 72 hours before SRT.
2. Per NMOCD (Million Gebremichael) the well will only need to be shut in long enough to reach reservoir pressures since this well will never have been disposed into. Post completion shut well in until approval is granted to perform SRT.
3. MIRU frac tanks for needed water volume (~3500 bbls)
4. MIRU Cudd Acidizing. (Tubing, casing, rate sensors)
5. Perform MIT test and bradenhead test. (If OCD on location requires it again post initial completion)
6. RU Kill truck and pressure up on the back side of tubing to 2000#'s and monitor throughout the job.
7. MIRU Renegade Wireline.
8. Make gauge ring run down tubing with wireline.
9. POH w/ wireline.
10. RU Spartek 1 1/4" Sapphire Memory Gauge.
11. RIH with wireline and memory gauge to top of open-hole injection interval (~10,420) to record BHP during SRT.
12. Begin SRT test at 0.5 BPM increasing by .5 BPM each step unless otherwise instructed by NMOCD. Each step in the test MUST be 60 minutes unless otherwise instructed by NMOCD.
13. The intent is to complete a SRT with at least three (3) steps below the 0.5 psi/ft gradient and three (3) steps above the fracture parting pressure (breakdown pressure). Or until surface pressures reach 90% of the maximum working pressure of well head/tree (4,500 PSI) TEST NEEDS TO BE PUMPED UNINTERRUPTED. Will have to start over if the test is interrupted.
14. After SRT is completed POH w/ wireline.
15. RD wireline.

Spud Date: 1/21/2024

Rig Release Date: 2/13/2024

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

SIGNATURE Jerry W Sherrell TITLE Regulatory Supervisor DATE 2/15/2024

Type or print name Jerry W Sherrell E-mail address: jerrys@mec.com PHONE: 575-748-1288

For State Use Only

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

MACK ENERGY CORPORATION

Fraser SWD #1

API # 30-005-64388

N-25-15S-28E

Step Rate Test Procedure

1. Notify NMOCD of plan to preform SRT 72 hours before SRT.
2. Per NMOCD (Million Gebremichael) the well will only need to be shut in long enough to reach reservoir pressures since this well will never have been disposed into. Post completion shut well in until approval is granted to perform SRT.
3. MIRU frac tanks for needed water volume (~3500 bbls)
4. MIRU Cudd Acidizing. (Tubing, casing, rate sensors)
5. Perform MIT test and bradenhead test. (If OCD on location requires it again post initial completion)
6. RU Kill truck and pressure up on the back side of tubing to 2000#'s and monitor throughout the job.
7. MIRU Renegade Wireline.
8. Make gauge ring run down tubing with wireline.
9. POH w/ wireline.
10. RU Spartek 1 ¼" Sapphire Memory Gauge.
11. RIH with wireline and memory gauge to top of open-hole injection interval (~10,420) to record BHP during SRT.
12. Begin SRT test at 0.5 BPM increasing by .5 BPM each step unless otherwise instructed by NMOCD. Each step in the test **MUST** be 60 minutes unless otherwise instructed by NMOCD.
13. The intent is to complete a SRT with at least three (3) steps below the 0.5 psi/ft gradient and three (3) steps above the fracture parting pressure (breakdown pressure). Or until surface pressures reach 90% of the maximum working pressure of well head/tree (4,500 PSI) **TEST NEEDS TO BE PUMPED UNINTERRUPTED. Will have to start over if the test is interrupted.**
14. After SRT is completed POH w/ wireline.
15. RD wireline.

MACK ENERGY CORPORATION

Fraser SWD #1

API # 30-005-64388

N-25-15S-28E

Tentative SRT Pump Schedule

Step	Rate	Step Time (Minutes)	Step Volume (BBLS)	Cumulative Time (Minutes)	Cumulative Volume (BBLS)
1	0.5	60	30	60	30
2	1	60	60	120	90
3	1.5	60	90	180	180
4	2	60	120	240	300
5	2.5	60	150	300	450
6	3	60	180	360	630
7	3.5	60	210	420	840
8	4	60	240	480	1080
9	4.5	60	270	540	1350
10	5	60	300	600	1650
11	5.5	60	330	660	1980
12	6	60	360	720	2340
13	6.5	60	390	780	2730
14	7	60	420	840	3150

NOTE –Schedule is subject to change based on test conditions, well conditions and/or recommendations per NMOCD representative.

NOTE – This well will have been newly completed prior to the SRT so there will be no injection history of volumes or pressure.



Cement & Casing Design

Uncompleted WBD

Location	FRASER SWD #1		API # 30-005-64388	
	SHL Section N-25-15S-28E			
	330 FSL 1550 FWL			
	32.9806306,-104.0887885		Date	2/15/2024
			Page	1

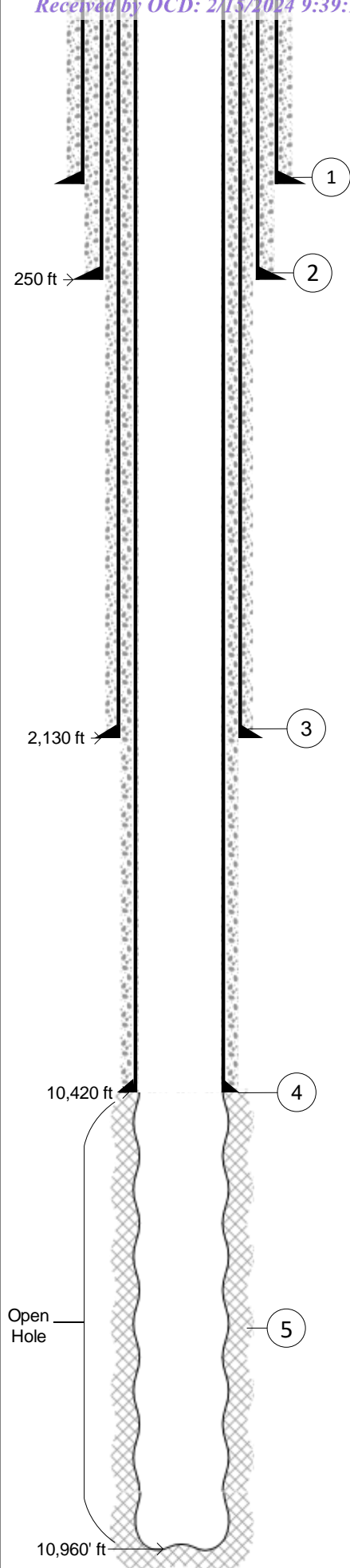
Tubular	Size (in.)	Weight (lbs/ft)	Grade	Thread	Top Depth (ft.KB)	Bottom Depth (ft.KB)
1. Conductor Casing	20"					
2. Surface Casing	13-3/8"	54.5#	J-55	ST&C	0	250'
3. Intermediate Casing	9-5/8"	36#	J-55	LT&C	0	2,130'
4. Production Casing	7"	26#	P-110	BTC	0	10,420'
5. Open Hole	6-1/8"				10,420'	10,960'

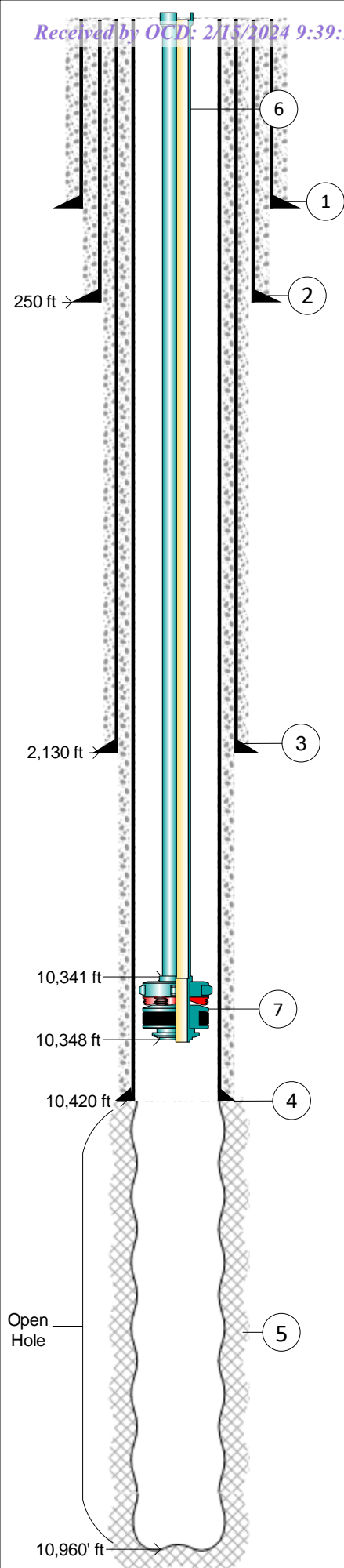
[illegible]

NOTES

This document is confidential correspondence between our company and its customer. It may not be reproduced in any form, in whole or in part, by any means including any electronic format, nor its contents disclosed to anyone but our employees and employees of our customer.

powerDRAW.net





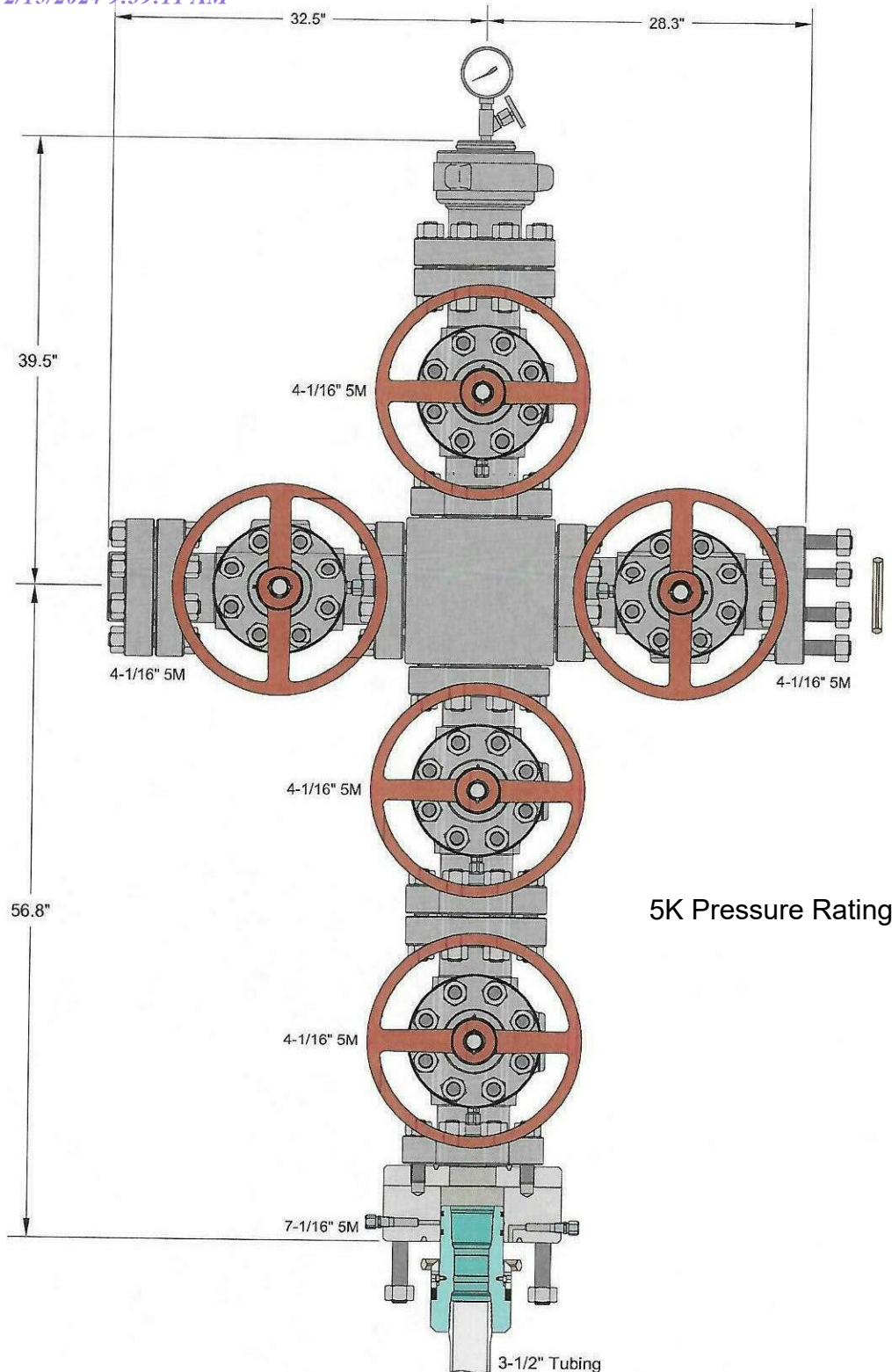
Location	FRASER SWD #1	API # 30-005-64388	
	SHL Section N-25-15S-28E		
	330 FSL 1550 FWL		
	32.9806306,-104.0887885	Date 2/15/2024	Page 1

Tubular	Size (in.)	Weight (lbs/ft)	Grade	Thread	Top Depth (ft.KB)	Bottom Depth (ft.KB)
1. Conductor Casing	20"					
2. Surface Casing	13-3/8"	54.5#	J-55	ST&C	0	250'
3. Intermediate Casing	9-5/8"	36#	J-55	LT&C	0	2,130'
4. Production Casing	7"	26#	P-110	BTC	0	10,420'
5. Open Hole	6-1/8"				10,420'	10,960'

[illegible]

This document is confidential correspondence between our company and its customer. It may not be reproduced in any form, in whole or in part, by any means including any electronic format, nor its contents disclosed to anyone but our employees and employees of our customer.

Released to Imaging: 2/15/2024 9:59:37 AM



INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

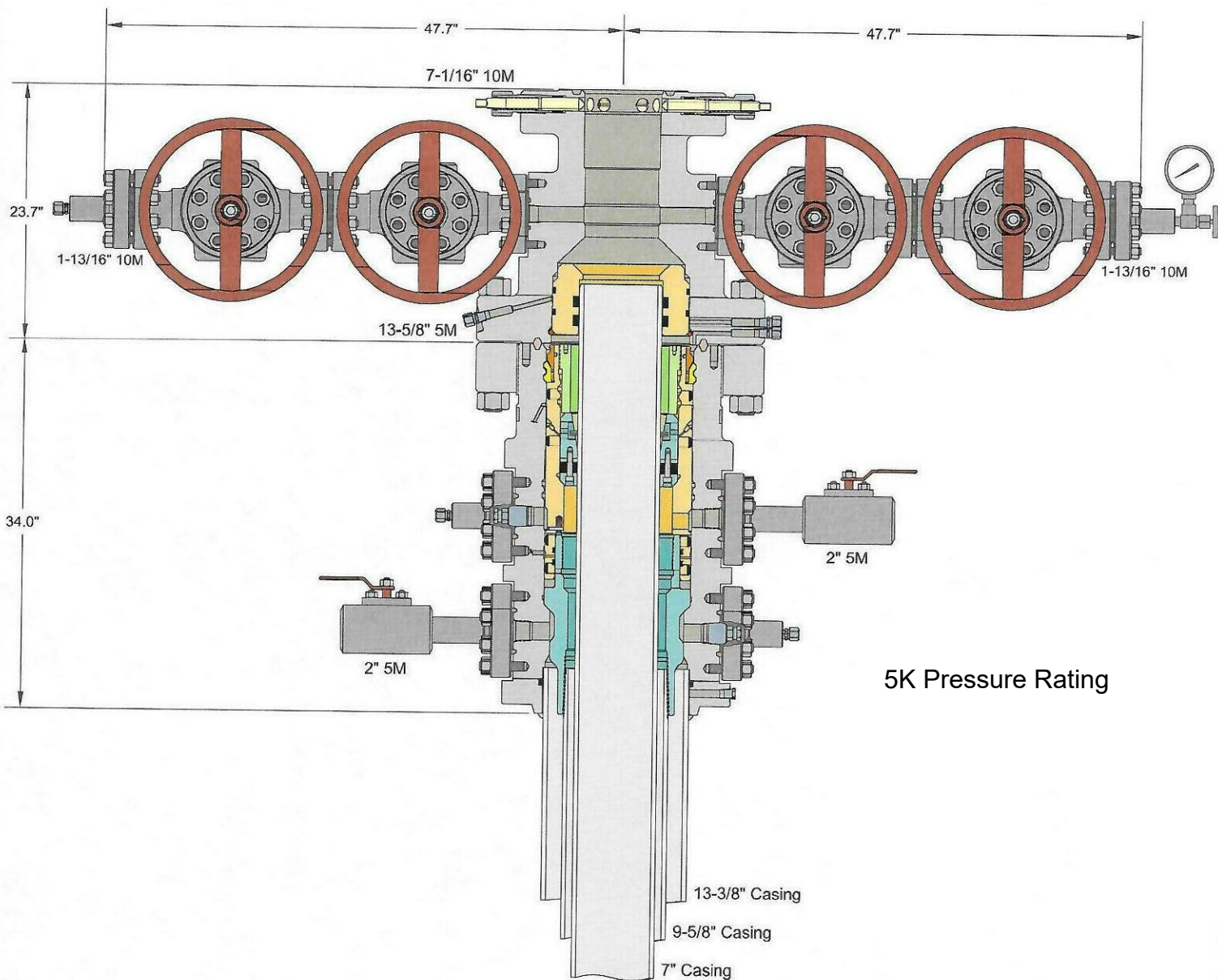
MACK ENERGY CORPORATION
EDDY CO, NM

7-1/16" 5M x 4-1/16" 5M SWD Production Tree Assembly
With 7-1/16" 5M x 4-1/16" 5M EN-(CL) Tubing Head Adapter

DRAWN	DLE	06DEC23
APPRV		

Released to Imaging: 2/15/2024 4:59:32 PM EN Tubing Hanger

DRAWING NO. HBE0001100



INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

MACK ENERGY
NEW MEXICO

13-3/8" X 9-5/8" X 7" 10M MBU-3T Wellhead System
With 9-5/8" Mandral Casing Hanger, 7" Slip Casing Hanger
And 13-5/8" 5M DBLHPS Tubing Head

DRAWN	DLE	12NOV21
APPRV		
DRAWING NO.	HBE0000630	



ELECTRONIC MEMORY RECORDERS Sapphire Pressure Gauge

Spartek Systems specializes in providing the oil and gas industry with high quality data to monitor well performance and diagnose potential problems. Founded in 1994, Spartek Systems leads the industry in providing cost effective solutions for acquiring reliable well information.

Product Overview

Spartek Systems once again demonstrates superior technological innovation with its latest series of Sapphire pressure recorders. Working closely with our customers, our engineering team has developed a multi-purpose gauge that significantly improves overall job performance. This new series of gauge incorporates the latest low-power three volt technology to minimize power consumption. Depending on the sampling rate, a pressure recorder could run up to one year on a single AA cell. Our engineers did not sacrifice signal resolution or sampling speed in order to reduce power consumption. The recorders utilize a proprietary parallel dual digital (PDD) signal processing technique to maximize signal to noise and improve resolution.

The SS2700 series also incorporates hybrid electronic technology to ensure long term operations at high temperatures. The software tools supporting the new Sapphire series have been enhanced to provide programming features such as pressure triggers, multi-job programming, detailed job logging, high sample rates (up to 10 samples per second), enhanced user diagnostics, and USB interface support. To learn more about these exciting new products, contact a Spartek Systems sales representative for more information.



Primary Features

- ▶ Long battery life
- ▶ 3 V, single cell operation
- ▶ 10 sample/s sampling rate
- ▶ Pressure trigger
- ▶ Sour service operation
- ▶ Designed for USB with retrieval rates up to 50,000 samples/min
- ▶ Data separation for multiple jobs
- ▶ Advanced diagnostics
- ▶ Surface readout
- ▶ Large Memory (up to 8,000,000 samples)
- ▶ Windows 10/8/7/Vista/XP/NT/2000

Applications

- ▶ Well Testing
- ▶ Monitor Well Performance
- ▶ Permanent Sensors (Monitoring)
- ▶ Completion Diagnostics
- ▶ Well Stimulation
- ▶ Reservoir Characterization
- ▶ Gradient Survey

SPARTEK SYSTEMS

Providing Our Customers With "Best In Class" Technology

Email: sales@sparteksystems.com

<http://www.sparteksystems.com>



Rev: 4/15/19

Specifications:

MODEL	SS2300 Series	SS2500 Series	SS2700 Series
Pressure Sensor Type Range(s) (psi) Accuracy ^{1,2} Resolution Drift	Sapphire 750, 1500, 3k, or 6k 0.3 psi or 0.03% Full-Scale 0.0003% Full-Scale < 0.03% Full-Scale / year	Sapphire 10k, 15k, or 20K* * (1.0" or 1.25" O.D. only) 0.3 psi or 0.03% Full-Scale 0.0003% Full-Scale < 0.03% Full-Scale / year	Sapphire 10k, 15k, or 20k* * (1.0" or 1.25" O.D. only) 0.3 psi or 0.05% Full-Scale 0.0003% Full-Scale < 0.03% Full-Scale / year
Temperature ³ Accuracy ⁴ Resolution	135°C (275°F) ± 0.5°C (0.9°F) < 0.001 °C (.0018°F)	150°C (302°F) ± 0.5°C (0.9°F) < 0.001 °C (.0018°F)	177°C (350°F) ± 0.5°C (0.9°F) < 0.001 °C (.0018°F)
Power Requirements Voltage (min) Current (Sleep) Current (Sample)	3 V 0.10 mA 4.50 mA	3 V 0.10 mA 4.50 mA	3 V 0.20 mA 4.80 mA
Data Acquisition Channels Fastest sample rate Memory Capacity Option(s) Pressure Trigger Redundant Memory	Pressure Temperature Time 10 samples/second 4,000,000 samples 8,000,000 samples Yes 2x, 4x	Pressure Temperature Time 10 sample/second 4,000,000 samples 8,000,000 samples Yes 2x, 4x	Pressure Temperature Time 10 sample/sec 4,000,000 samples Yes 2x, 4x
Housing Material Options Diameter Length	Stainless Steel 17-4 PH DH1150 718 Age Hardened Inconel - NACE MRO175 0.75", 1.00", or 1.25" Varies with configuration		
Communications	RS232 / USB		
Software OS	Windows 10/8/7/Vista/XP/NT/2000		
Surface Readout	Yes		

Notes:

1. Accuracy is larger of the two stated values. This includes the combined effects of hysteresis, repeatability, and the corrected linearity over the calibrated temperature range.
2. Pressure accuracy for the lower pressure transducers are based on the following calibrated temperature ranges: 750 psi (0 to 80°C), 1500 psi (0 to 100°C), and 3000 psi (0 to 120°C). All other transducers are based on maximum operating temperature specified. Consult your SparteK representative for specifications at other calibrated temperature ranges.
3. Operating Temperature Range for the equipment is stated from 0°C to max temperature. Actual calibrated temperature range can vary based on customer requirements. The standard calibration range for the SS2700 is 0°C to 170°C (standard lithium batteries are rated to 165°C max).
4. Temperature accuracy is valid for tools with PT1000 RTD. Temperature Accuracy can be calibrated to better than <0.15°C on request.

Specifications subject to change without notice

For More Information, Pricing, and Technical Support Contact:



#1 Thevenaz Industrial Trail
Sylvan Lake, Alberta
Canada, T4S 2J6

Tel: (403) 887-2443
Fax: (403) 887-4050

Providing Our Customers With "Best In Class" Technology

Email: sales@sparteksystems.com<http://www.sparteksystems.com>

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

CONDITIONS

Action 314661

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 314661
	Action Type: [C-103] NOI General Sundry (C-103X)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	Once the shut-in pressure reaches, the initial reservoir pressure, make sure the well is shut in for a few hours to achieve a stable reservoir pressure (depicted in a stable horizontal line on the plot) before commencing injection for the test.	2/15/2024