District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-101
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

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

[1] Operator Name and Address	[2] OGRID Number
City of Carlsbad/I & W, inc. 101 N Halagueno St. Carlsbad, NM 88220	~~n/a~~ 10866
	[3] API Number 30 – 015-22574

[3] Property Code	[5] Property Name	[6] Well No.
~~n/a~~ 25398	I & W Brine	Eugenie 1

[9] Proposed Pool 1	[10] Proposed Pool 2
~~BW-6~~ BSW, Salado	n/a

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	South line	Feet from the	West line	County
M	17	22S	27E	M		995		641	Eddy

[8] Proposed 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

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
E	M	R	P	3,126'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	700'	Salado	Cudd	TBD

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
8 5/8"	7"	23 lb./ft.	456	n/a	Surface
5"	4.5"	12.5 lb./ft.	700	n/a	n/a

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Complete brine cavern monitoring well. See attached Cudd drilling program.

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

Signature:

Printed name: Harry Burgess

Title: City Administrator

E-mail Address: hburgess@cityofcarlsbadnm.com

Date: 6/29/10 Phone: 575-887-1191

OIL CONSERVATION DIVISION

Approved by:

Title: Acting Division Director

Approval Date: 7/7/2010 Expiration Date: 7/7/2011

Conditions of Approval Attached ☑

N. MEXICO OIL CONSERVATION COMMISS.

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Permian Brine Sales & Service, Inc.	~~Salt Water~~ Eugenie	1

Unit Letter	Section	Township	Range	County
M	17	22South	27East	Eddy

Actual Footage Location of Well:
995 feet from the South line and 641 feet from the West

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3126.4			Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

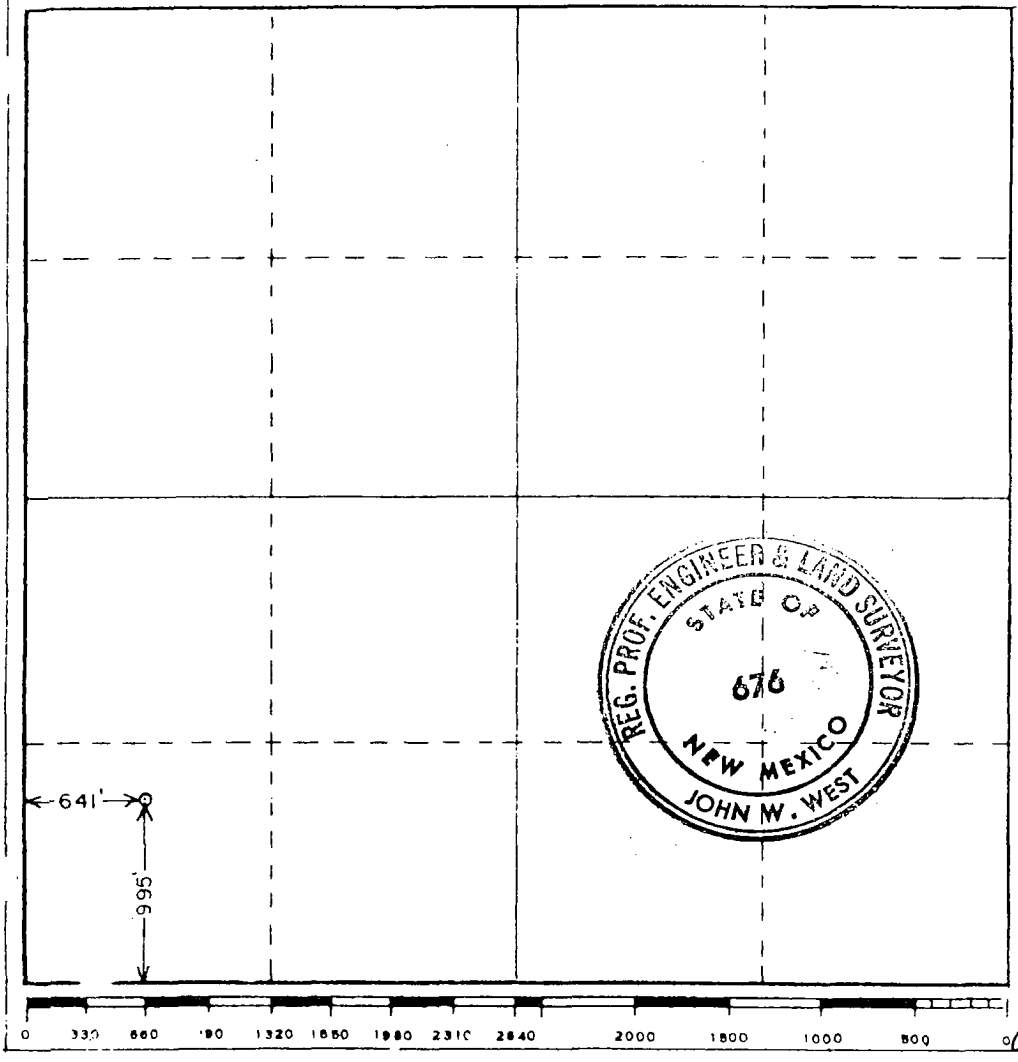
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name: [illegible] President

Position

Company: Permian Brine Sales & Service, Inc

Date: 5-26-78

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 knowledge and belief.

May 15, 1978

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. John W. West 676
Ronald J. Eidson 3239

NO. OF COPIES RECEIVED	5	
DISTRIBUTION		
SANTA FE	1	
U.S.	1	✓
T.G.S.	2	
LAND OFFICE		
OPERATOR		

Bur. of Mines 1

RECEIVED
JUL 17 1978
O. C. C.
ARTESIA, OFFICE

Form C-105
Revised 10-1-78

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease: State ☐ Fee ☒
5. State Oil & Gas Lease No.

1a. TYPE OF WELL
b. TYPE OF COMPLETION
OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER Brine Water Well
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER

7. Unit Agreement Name
8. Farm or Lease Name: Eugenie
9. Well No.: 1

2. Name of Operator: Permian Brine Sales & Service, Inc. ✓
3. Address of Operator: P.O. Box 1591, 212 West 5th St., Odessa, Texas 79760
10. Field and Pool, or Wildcat: Wildcat

4. Location of Well:
UNIT LETTER M LOCATED 995 FEET FROM THE South LINE AND 641 FEET FROM THE West LINE OF SEC. 17 TWP. 22S RGE. 27E NMPM
12. County

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead
6-14-78	6-28-78	6-30-78	3126 G.L.	3129

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
663	587		→		All

24. Producing Interval(s), of this completion — Top, Bottom, Name
456 Top of Salt to 592 Bottom of Salt

25. Was Directional Survey Made: No

26. Type Electric and Other Logs Run
Cable Tool Drillers Log

27. Was Well Cored: No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	40	349.4	12"	170 sx. - circulated	None
7"	23	456	9"	135 sx. - circulated	None

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 7/8	587'	No

31. Perforation Record (Interval, size and number)
None

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
None	

33. PRODUCTION DNA

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.)
Test Witnessed By

35. List of Attachments
Drillers Log

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED L. L. Jackson TITLE President DATE 7/14/78

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than [illegible] days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radioactivity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiply completed wells, Items 35 through 38 shall be reported for each zone. This form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy		T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Salt	456	T. Strawn		T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt	592	T. Atoka		T. Pictured Cliffs		T. Penn. "D"	
T. Yates		T. Miss		T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen		T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg		T. Montoya		T. Mancos		T. McCracken	
T. San Andres		T. Simpson		T. Gallup		T. Ignacio Qtzte	
T. Glorieta		T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb		T. Granite		T. Todilto		T.	
T. Drinkard		T. Delaware Sand		T. Entrada		T.	
T. Abo		T. Bone Springs		T. Wingate		T.	
T. Wolfcamp		T.		T. Chinle		T.	
T. Penn.		T.		T. Permian		T.	
T. Cisco (Bough C)		T.		T. Penn. "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from ..... to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from ..... to ..... feet. .....

No. 2, from ..... to ..... feet. .....

No. 3, from ..... to ..... feet. .....

No. 4, from ..... to ..... feet. .....

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation

CUDD

ENERGY SERVICES

Brine Well Project

City of Carlsbad
Well Name: I & W – BW 6 Eugenie #1

April 20, 2010

12118 West I-20 East
Odessa, TX. 79765
Office: 432.563.3356
Fax: 432.563.0013

Cudd Energy Services
12118 West I-20 East
Odessa, TX 79765
Phone: (432) 563-3356
Fax: (432) 563-0013

Discussion

City of Carlsbad
I & W-BW 6 Eugenie #1

Re: **Brine Well Project**

After the collapse of shallow brine water wells throughout the Permian Basin, there became a major safety and economical concern for the Eugenie #1 in Carlsbad. A solution for preventing this cavern from caving is needed in a way where there will be minimal disruption of the cavern as well as keeping personnel as far away from the wellhead as possible. By performing the job with Coiled Tubing, we will be able to complete the job with all personal away from the wellhead during drilling operations, as well as avoiding introducing any additional weight directly on the cavern.

The objective of this project is to gain access to both the upper and lower cavern in the safest way possible. The first section of this project will be to drill up 442 +- feet of cement to the CIBP in the 7 inch casing. This will be completed with 1.75" CT, 2.88" motor, 2.88" jars, and 6.25" mill (see figure 1). Work over fluid will be Fresh water pumped down coil tubing and reclaimed in the flow back tank. All equipment will be approximately 120-140 feet from the wellhead on the west side of the I & W site (see figure 2). Once all the cement is removed from the 7" casing and the CIBP is tagged, a bond log on E-line will be ran to determine how much of the 7" casing is protruding into the cavern. If the sonar tool company representative determines that a accurate sonar reading can not be achieved due to the casing "blocking the view" of the tool, the excess casing and CIBP will be cut off with a abrasive sand cutting tool. If there is no excess casing, the CIBP can be drilled up or a sand cut can be made. Should the sand cut be required, the Sand Cutting BHA (see figure 3) will be installed onto the coiled tubing and ran in the wellbore to a predetermined depth. Once at that depth, 1 ppg added slurry of sand and fresh water will be pumped to cut the casing. The coiled tubing will be run down to the depth where the CIBP was previously tagged to ensure the casing cut and fell into the cavern. The sonar tool will then be run to evaluate the size of the upper cavern.

Gaining access to the lower cavern will require landing 3 ½" tubing directly onto the floor of the upper cavern. This will allow more efficient drilling as well as ensuring the sonar tool will enter the lower cavern. The tubing will be lowered into the well by the crane in doubles and hung in the spider bowl. The connection to the next double will be made up, the slips will be released, and then the string will be lowered into the well. This process will be repeated until the floor of the upper cavern is tagged, then the tubing will be set in the tubing hanger. The CTU can then be rigged up along with a 2.75" mill, 2.13" motor, 2.13" jars, and 20' of 2.13" stiff joints (see figure 4) in order to drill open hole to the lower cavern. During drilling operations, returns will be taken up the 3 ½" unless well conditions dictate we need to use the 7" for returns. The BHA should never completely exit the 3 ½" tubing. Voids will be detected while drilling by monitoring the string weight, motor torque and pump pressure.

Cudd Energy Services
12118 West I-20 East
Odessa, TX 79765
Phone: (432) 563-3356
Fax: (432) 563-0013

Discussion Continued

After drilling operations have begun we will see an increase in pump pressure due to motor torque and when drilling out of formation and into a void area torque and pump pressure will drop. Once the lower cavern is reached, two additional trips should be made from the tubing to the lower cavern to ensure the open hole is free of debris. The sonar tool will then have access to analyze the lower cavern.

Procedure

1. Hold safety meeting. Review entire job procedures with applicable personnel. Ensure that all personnel are fully aware of the scope of work, individual responsibilities, and appropriate safe practices.

2. Spot equipment in designated areas shown in Figure 1.

3. Cut plate and locator pipe off casing and install 7" casing head and test to predetermined pressure. (see figure 7)

4. Rig up all equipment. Coil tubing unit (CTU), fluid pump, flow back manifold, flow back tank, frac tank, water trucks and 350 ton crane. Rig up Flow line to 7" casing head outlets.

5. Rig up 1.75 Coil tubing unit and fluid pump, install BHA and test.

6. RIH with 1.75" CT, 2.88" motor, 2.88" jars, 2.88 hydraulic disconnect and 6.25" mill. pumping 2 bbls / minute fresh water down coil tubing, drill cement from surface to CIBP @ 438' +-. (CTU will have to POH to change mills prior to drilling CIBP) Taking returns up 7" thru choke manifold out to return tank.

7. Rig up E-line unit with Cement bond log tools on 7" well head

8. RIH with Cement Bond Log on E-line in order to determine amount of casing protruding into cavern, POOH. Evaluate DATA, determine if casing can be cut above CIBP or do we need to drill out CIBP

   a) Determine if the casing hanging in the well will interfere with Sonar readings.
   b) If casing can be cut above CIBP rig up sand cutting equipment
   - Run in hole with 1.75 coil dressed with sand cutting BHA to predetermined depth and begin pumping sand slurry at 2 bbls/min and 1 ppg sand added for 10 minutes to cut casing. POH with coil and RIH with E-line to confirm casing has been cut.
   c) If CIBP needs to be drilled out rig up CTU with 2.88 BHA dressed with Metal muncher mill RIH and drill out CIBP. POH and rig off Well Head.

9. RIH with E-line and Sonar cavern, POOH.

Cudd Energy Services
12118 West I-20 East
Odessa, TX 79765
Phone: (432) 563-3356
Fax: (432) 563-0013

Procedure
Continued

10. Install tubing hanger for 3 ½" 9.3 ppf tubing.
11. Make up seven 3 ½ doubles and prep to deploy into well
12. Using the crane and 3 ½ lift nubbins, lower the first 3 ½ "double in the well and hang it in the spider bowl.
13. Pick up the next double and make the connection.
14. Release the slips and lower tubing into the well. Continue this until the tubing is sitting on the cavern floor.
15. Once the cavern floor has been tagged, space out, install wrap around slips and land 3 ½" tubing in the hanger.
16. Rig up 1.75 CT injector head onto 3 ½" tubing with 2.75" mill, 2.13" motor, 2.13" jars, and 20' of 2.13" stiff joints. Drill formation to the lower cavern, POOH, and rig down CTU.
17. RIH thru 3 ½ tubing with Sonar tool into lower cavern and Evaluate data.

Figure 1

THRU TUBING SOLUTIONS

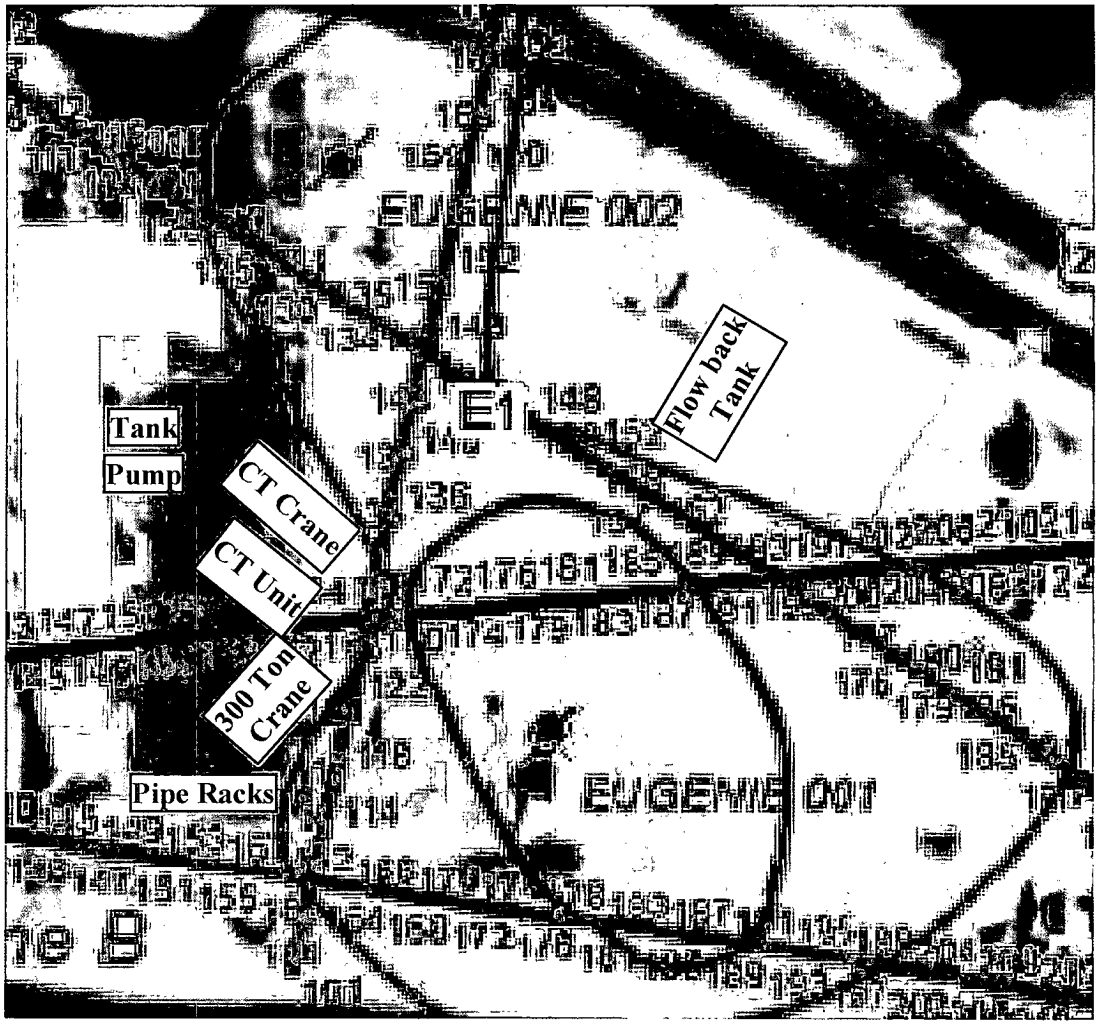
Customer: City of Carlsbad	Lease: BW 6 Eugenie	
Address:	Field:	
	County/Province:	
	CT / Snubbing Co.: 1 3/4OD Coil Tubing	
Customer Rep.:	LSD:	
Phone:	Type of Operation: Drill Cement	

Tool OD (in.)	Tool ID (in.)	Tool Diagram	Length (ft.)	Description	Connection (Make-Up Torque)	Drop Ball	Part #/Asset #
2.68	1.13		1.62	Coiled Tubing Connector External Slip Type Fit 1.75" O.D. Coil	2-3/8" PAC Pin On (1,500 Ft/Lbs)		MHA287-200-09
2.68	1.00		2.00	Dual Flapper Back Pressure Valve	2-3/8" PAC Box Up (1,500 Ft/Lbs) x 2-3/8" PAC Pin On (1,500 Ft/Lbs)		MHA287-200-08
2.68	1.00		7.00	Hydraulic Coiled Tuding Jar	2-3/8" PAC Box Up (1,500 Ft/Lbs) x 2-3/8" PAC Pin On (1,500 Ft/Lbs)		MHA287-200-08
2.68	0.69		2.07	Hydraulic Disconnect	2-3/8" PAC Box Up (1,500 Ft/Lbs) x 2-3/8" PAC Pin On (1,500 Ft/Lbs)	3/4" (.750)	MHA287-200-07
2.68	0.56		1.58	Circulation Sub	2-3/8" PAC Box Up (1,500 Ft/Lbs) x 2-3/8" PAC Pin On (1,500 Ft/Lbs)	5/8" (.625)	DCS287-200
2.68			13.19	Team Max Downhole Motor	2-3/8" PAC Box Up (1,500 Ft/Lbs) x 2-3/8" PAC Box On (1,500 Ft/Lbs)		MTR287-487
3.25			0.75	Roller Cone Bit	2-3/8" PAC Pin Up		REIT458-238R
		Overall Length:	28.19	BHA Prepared By:	Jim McCormick	Date:	4/30/2019

Notes:

CUDD
ENERGY SERVICES

Figure 2



Cudd Energy Services
Odessa, TX
Office: (432) 563-3356
Fax: (432) 563-0013

Figure 3

THRU TUBING SOLUTIONS

Customer: City of Carlsbad		Lease: SW 6 Eugenie
Address:		Field:
		County/Province:
		CT / Snubbing Co.: 1 3/4OD Coil Tubing
Customer Rep.:		LSD:
Phone:		Type of Operation: Cut Casing

Tool OD (in.)	Tool ID (in.)	Tool Diagram	Length (ft.)	Description	Connection (Make-Up Torque)	Drop Ball	Part #/Asset #
2.68	1.13		1.68	Coiled Tubing Connector External Slip Type F/1.75" O.D. Coil	2-3/8" PAC Pin On (1,580 Ft/Lbs)		MHA287-208-09
2.68	1.00		2.00	Dual Flapper Back Pressure Valve	2-3/8" PAC Box Up (1,500 Ft/Lbs) x 2-3/8" PAC Pin On (1,580 Ft/Lbs)		MHA287-208-08
2.68	1.00		7.02	Hydraulic Coiled Tubing Jar	2-3/8" PAC Box Up (1,500 Ft/Lbs) x 2-3/8" PAC Pin On (1,580 Ft/Lbs)		MHA287-208-06
2.68	0.69		2.07	Hydraulic Disconnect	2-3/8" PAC Box Up (1,500 Ft/Lbs) x 2-3/8" PAC Pin On (1,580 Ft/Lbs)	3/4" (.750)	MHA287-208-07
2.68			13.19	Titan Max Downhole Motor	2-3/8" PAC Box Up (1,500 Ft/Lbs) x 2-3/8" PAC Box On (1,500 Ft/Lbs)		MTR287-407
5.25			1.25	High Velocity Jet Cutter	2-3/8" PAC Pin Up (1,580 Ft/Lbs)		
		Overall Length:	27.19	BHA Prepared By:	Jim McCormick	Date:	4/20/2010

Notes:

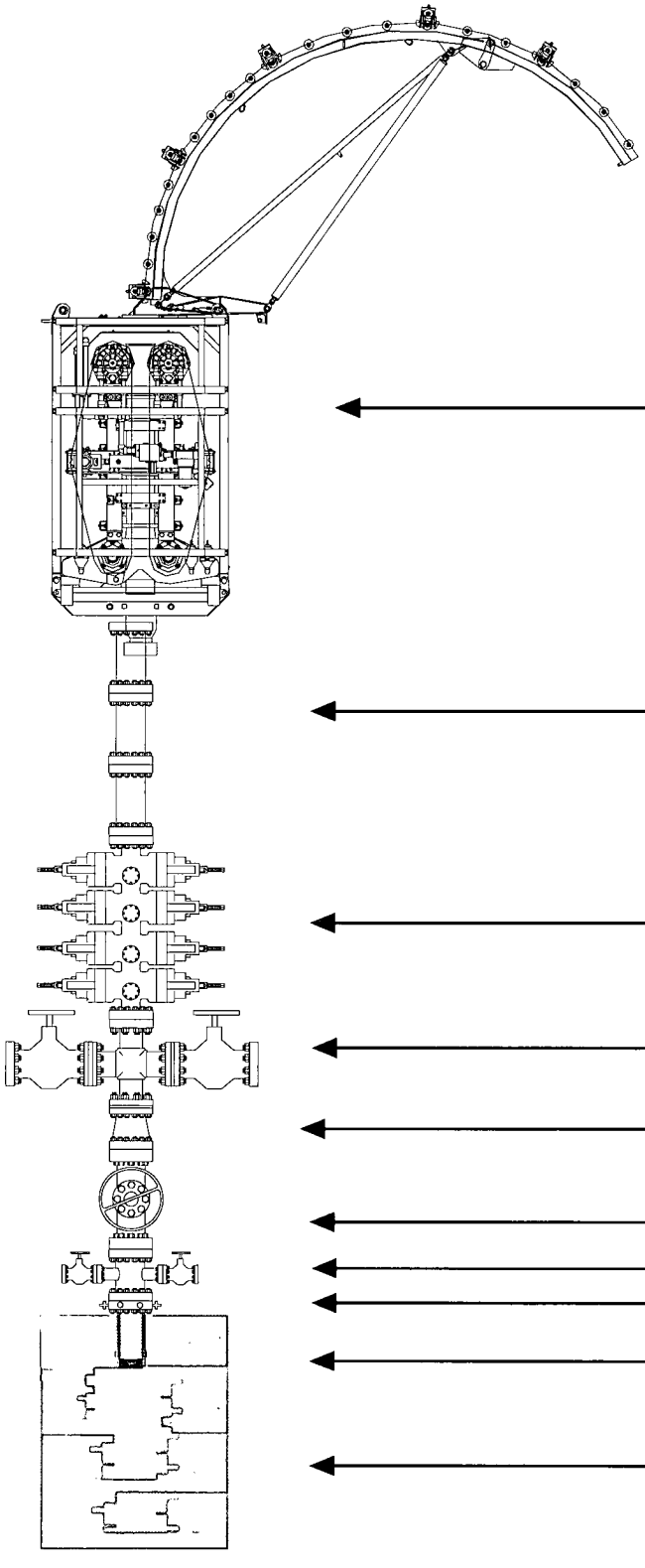
Figure 4

THRUTUBING SOLUTIONS

	Customer: City of Carlsbad	Lease: BW 8 Eugenie
	Address:	Field:
		County/Province:
		CT / Snubbing Co.: 1 3/4OD Coil Tubing
	Customer Rep.:	UWI:
	Phone:	Type of Operation: Drill Cavern

Tool OD (in.)	Tool ID (in.)	Tool Diagram	Length (ft.)	Description	Connection (Make-Up Torque)	Drop Ball	Part #/Asset #
2.13	1.00		3.00	Coiled Tubing Connector Weld-On Type P/1.75 O.D. Coil	1-1/2" AM MT Pin Up (700 Ft/Lbs)		
2.13	1.00		1.70	Dual Flapper Back Pressure Valve	1-1/2" AM MT Box Up (700 Ft/Lbs) x 1-1/2" AM MT Pin Up (700 Ft/Lbs)		MHA313-200-05
2.13	1.00		10.00	Long Weight Bar	1-1/2" AM MT Box Up (700 Ft/Lbs) x 1-1/2" AM MT Pin Up (700 Ft/Lbs)		WB313-213
2.13	1.00		10.00	Long Weight Bar	1-1/2" AM MT Box Up (700 Ft/Lbs) x 1-1/2" AM MT Pin Up (700 Ft/Lbs)		WB313-213
2.13	0.75		5.67	Hydraulic Coiled Tubing Jar	1-1/2" AM MT Box Up (700 Ft/Lbs) x 1-1/2" AM MT Pin Up (700 Ft/Lbs)		WB313-213
2.13	0.63		1.74	Hydraulic Disconnect	1-1/2" AM MT Box Up (700 Ft/Lbs) x 1-1/2" AM MT Pin Up (700 Ft/Lbs)	5/8" (.625)	MHA313-200-07
2.13	0.44		1.16	Circulation Sub	1-1/2" AM MT Box Up (700 Ft/Lbs) x 1-1/2" AM MT Pin Up (700 Ft/Lbs)	1/2" (.500)	DC8313-200
2.13			11.60	Titan Downhole Motor	1-1/2" AM MT Box Up (700 Ft/Lbs) x 1-1/2" AM MT Box Up (700 Ft/Lbs)		MTR313-200-03
2.75			1.04	Junk Mill / Bear Claw	1-1/2" AM MT Pin Up (700 Ft/Lbs)		
		Overall Length:	43.10	BHA Prepared By:	Jim McCormick	Date:	4/30/2010

Figure 5



Ejector Head

30 ft. Lubricator

Quad Blowout Preventor

4 1/16" Flow Cross

7 1/16" x 4 1/16" Adapter Spool

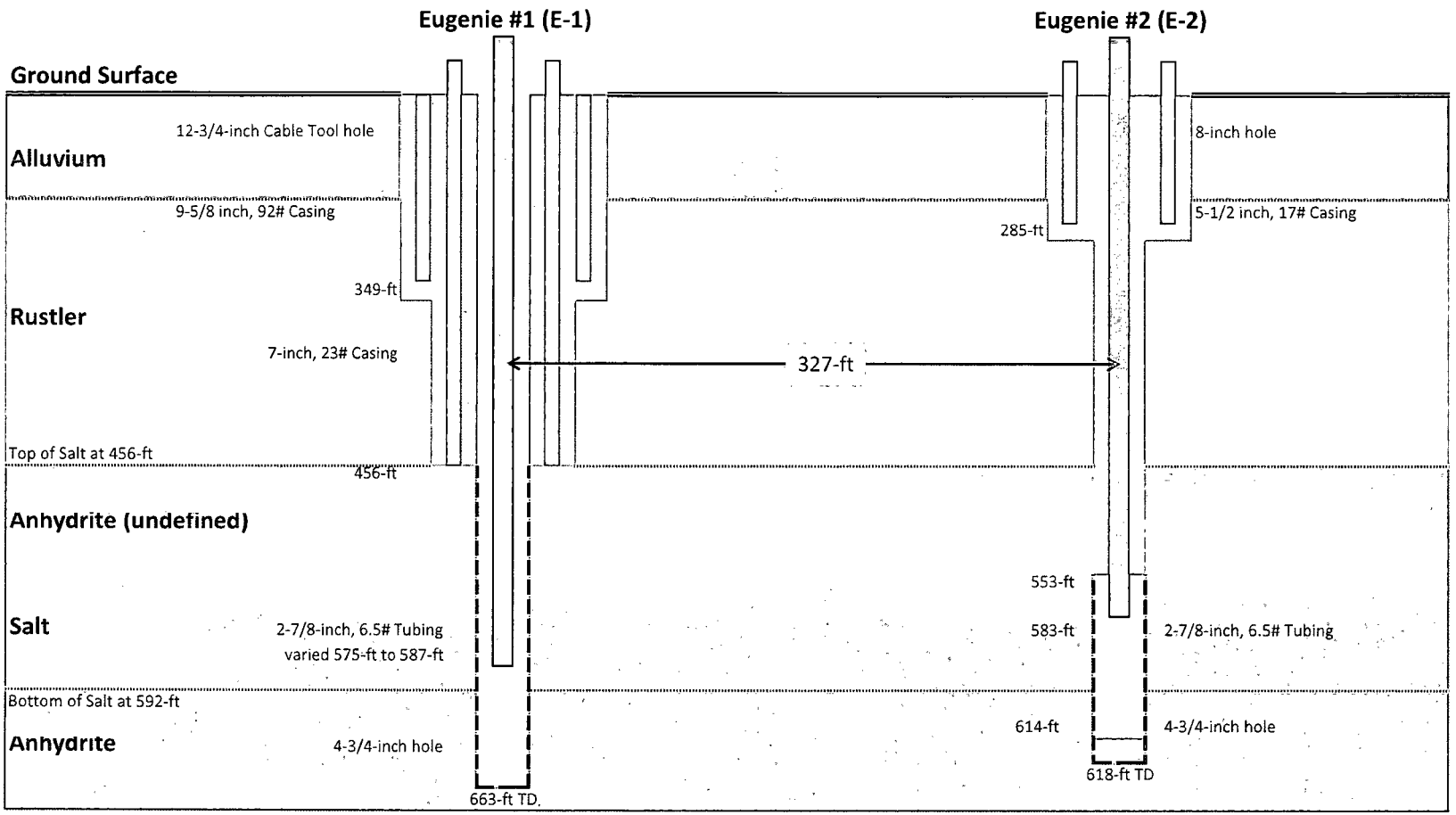
7 1/16" 5M Valve

7 1/16" Flow Cross

7" Well Head

Top of Cavern at 434.7'
7" Casing and CIBP +-442'

Cavern Floor at 468.9'
Footage between caverns unknown
Floor or lower cavern unknown


Eugenie #1 (E-1)
Eugenie #2 (E-2)
Ground Surface
12-3/4-inch Cable Tool hole
Alluvium
9-5/8 inch, 92# Casing
349-ft
Rustler
7-inch, 23# Casing
Top of Salt at 456-ft
456-ft
Anhydrite (undefined)
Salt
2-7/8-inch, 6.5# Tubing
varied 575-ft to 587-ft
Bottom of Salt at 592-ft
Anhydrite
4-3/4-inch hole
663-ft TD.
327-ft
8-inch hole
285-ft
5-1/2 inch, 17# Casing
553-ft
583-ft
2-7/8-inch, 6.5# Tubing
614-ft
4-3/4-inch hole
618-ft TD

CITY OF CARLSBAD
BW #6 EUGENE #1

GATE VALVE:
3-1/8"5M X 3-1/2"EUE XYLAN COATED, 17-4 INTERNALS

TUBING HEAD ADPT:

FIG 612 SLIP FLG ADPT
7-1/16 3M X 3-1/2 S&S

TUBING HANGER:

TC-2W WRAPAROUND 7" X 3-1/2"

TUBING HEAD ASSEMBLY:

TCM 7 1/16"3M X 7"8RD W/2-2"LPO
BALL VALVE 2"LP 3M

BELLED NIPPLE:

7"8RD LC X 7"SOW