Attachment B. Geological and Geophysical Data

Part II. Proposed Formation Testing Program (40 CFR 146.12 & 146.70)

Samples collected during drilling will be collected on the injection and confining zones for physical and chemical characteristics.

The open hole logging program will determine the formation characteristic including, formation tops, porosity, thickness, temperature, fluid level.

After completion a wireline obtained sample of the formation fluid will be analyzed for fluid characteristics.

A Pressure integrity test/ Injection fall -off tests will be performed to determine estimated fracture pressure and Permeability.

Attachment C. Well Construction/Conversion Information

Part I. Wellbore Schematic (40 CFR 146.24)

Attached and titled "Construction Details – Subsurface"

Part 11. Well construction or Conversion Procedures

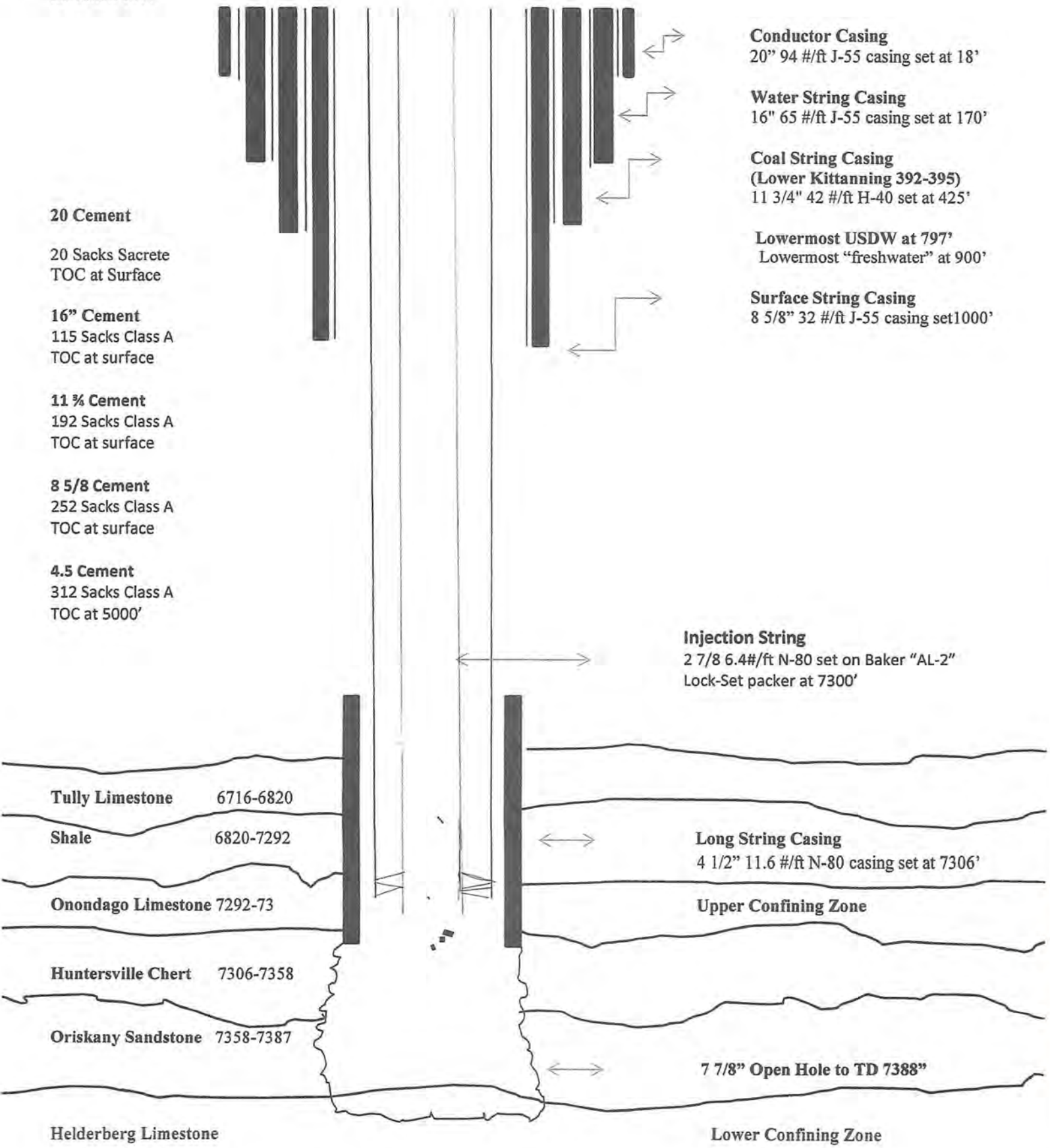
Attached and titled "Construction Procedures"

EPA Permit# PAS2D020BLCE
DEP Permit# 37-033-27255-00-00

(revised 3/28/20)
Construction Details –subsurface
Zelman#1 Injection Well

ZELMAN WELLBORE SCHEMATIC

Elevation 1697



EPA Permit# PAS2D020BLCE
DEP Permit# 37-033-27255-00-00

ZELMAN INJECTION WELL SURFACE FACILITY

Construction Procedures
Zelman#1 Injection Well

PLAN TO DRILL

1. Ensure all necessary state and federal permits, vendor contracts, and insurances are in order.

2. Post E&S plans, permits, and site ID Sign.

3. Construct Location per Erosion and Sediment Control Plan.

4. Drill 18' of 24" hole

5. Set 18' of 20" (94#/ft) J55 conductor casing with back hoe; and cement to surface.

6. Hand grout with 20 sacks of sacrete

7. Move in rig

8. Nipple up on 20" casing.

9. Pick up 19" Bit and drill to 170''.

10. Run 170'of 16" (65#/ft) J55 grade casing with centralizer on each joint.
Run Cement Basket 65'.

11. Cement 16" casing to surface with 115 sacks of class A cement with ½ # cello-flake and 2% Calcium Chloride per sack. Cement is to be mixed at 15.6 #/gal with a yield of 1.20 cu ft / sack. Calculated volume is based on 40% excess.

12. Wait on Cement for 8 hours.

13. Nipple up on 16" casing, pick up 14 ¾" bit, drill to 440' and trip out of hole.

14. Run 425' of 11 ¾" (42 #/ft) H-40 grade casing with a centralizer on each joint.
Run cement basket at 160'.

15. Cement 11 ¾" casing to surface with 192 sacks of class A cement with ½ # cello-flake and 2% Calcium chloride per sack. Cement is to be mixed at 15.6 #/gal with a yield 1.20 cu ft/ sack. Calculated volume is based on 30% excess in open hole sections.

16. Wait on cement for 8 hours.

17. Nipple up on 11 ¾" casing, pick up 10 5/8"bit, drill to 1025'and trip out of hole.

18. Run 1000' of 8 5/8" (32 #/ft) J-55 casing with a centralizer on every 2 joints. Run cement basket at 360'.

19. Cement 8 5/8" casing to surface with 252 sacks of class A cement with 1/4 # and 2% Calcium Chloride per sack. Cement is to be mixed at 15.6 #/gal with a yield 1.20 cu ft/ sack. Calculated volume is based on 30% excess in open hole.

20. Wait on cement for 8 hours.

21. Run Bond log on 8 5/8 casing.

22. Install 11" 5M x 8 5/8 wellhead

23. Nipple up 11" 3M annular preventer.

24. Test stack to 3000 psi

25. Pick up 7 7/8" bit and trip in hole.

26. Drill to total depth in the Helderberg Limestone at an estimated 7388'.

27. Catch cutting samples every 30' from 6500'-7200'.

28. Catch samples every 10' from 7200' to TD.

29. Trip out of hole.

30. Run open hole logging suite to consist of Gamma Ray, Caliper, dual induction, neutron porosity, density porosity and temperature. Run logs from TD to surface casing seat with Gamma Ray log to surface.

31. Run 4 ½" (11.6 #/ft) N- 80 casing to bottom of Onondago Limestone at 7306' Run centralizer on every 3 joints from 7306-5000'.

32. Set casing on cement packer shoe and cement casing back to 5000' ft with 312 sacks of Class A with 2% Calcium Chloride per sack, 6% gel, 10% sodium chloride, 1% fluid loss Cement is to be mixed at 13.5 #/gal with a yield of 1.93 cu ft/sack.

33. Lift blow out preventer stack and set casing slips and wellhead assembly.

34. Rig down and move out rig.

35. Wait on cement for 24 hours.

36. Run CBL log on 4.5" casing.

37. Move in service rig

38. Trip in hole with 3 7/8" tri-cone on 2 3/8" work string and blow hole dry.

39. Drill out cement packer with air/foam.

40. Trip to bottom and clean hole.

41. Trip out of hole and Pick up Baker Oil Tools packer assembly.
    Baker model 45A4 "AL-2" Lok Set Casing Packer with on/off seal assembly

42. Trip in hole with 2 7/8" (6.4 #/ft) N-80 tubing and set packer at base of production casing at 7300'.

43. Pressure test 2 7/8" tubing x 4 ½" casing annulus to 4500 psi.

44. Rig down and move out service rig

Casing and Cementing Data

Casing Data	Size	Type	Weight	Grade	Set Depth	Collapse Press.	Int. Yield Press.	Axial Loadings	Basket	Centralizers
	(inches)				(ft)	(psi)	(psi)		ft)	
Conductor	20		94	J-55	18					
Water String	16	LT&C	65	J-55	170	670	1640	439000	65	every joint
Water String	11.75	LT&C	42	H-40	425	1070	1980	307000	160	every joint
Surface Casing	8 5/8	LT&C	32	J-55	1000	2530	3930	417000	400	every 2 joints
Long String	4.5	LT&C	11.6	N-80	7306	6350	7780	223000		every 3 joints
Injection String	2 7/8	EUE	6.4	N-80	7300	11160	10575	144960		

Cement Data	Size	Class	Amount	CaCl	Cello Flake	Yield	Density	Volume		
	(inches)		(sacks)	%	(#/sack)	(cu.ft./sack)	(#/gal)	(bbls)		
Conductor	20	sacrete	20	0	0.00	1.2	15.6	3.1		
Water String	16	A	115	2	0.50	1.2	15.6	24.5		
Water String	11.75	A	192	2	0.50	1.2	15.6	40.9		
Surface String	8 5/8	A	252	2	0.25	1.2	15.6	53.7		
Long String	4 1/2	A	312	2	0.00	1.93	13.5	102.1		
Injection String	2 7/8	N/A								

*Note: Cement Volumes Include Excess

Operator Name: Windfall Oil & Gas
Well Name: Windfall Oil & Gas 0
March 24, 2020

Job Information — 16" Surface

Open Hole	0 to 170	ft. MD
Inner Diameter	19	in.
40% Excess from 170 ft to 0 ft	136.3	ft^3
Casing	0 to 170	ft. MD
Outer Diameter	16	in.

Pump Schedule — 16" Surface

Fluid #	Fluid Type - Name	Surface Density (lb/gal)	Estimated Avg. Rate (bbl/min)	Downhole Volume (bbl)	Water Required (bbl.)	Top of Fluid (ft)
Spacer 1	Fresh Water	8.34	5	5.0	5.0	0
Cement	Class A	15.60	5	24.5	14.4	0
			TOTALS	**29.5**	**19.4**	
			Estimated pump time @ 4 bpm	**0.12**	hrs	
			Estimated pump time @ 8 bpm	**0.06**	hrs	

Fluids Design — 16" Surface

Spacer 1 Fresh Water

Fluid Density:	8.34 lb/gal
Fluid Volume:	5.0 bbls

Scavenger Class A
Base Slurry Class A Cement
2% BWOC Calcium Chloride

Slurry Density:	15.60 lb/gal
Slurry Yield:	1.20 ft^3/sk
Mixing Water	5.25 gal/sk
Total sacks	115 sks
Total barrels	24.5 bbls

Operator Name: Windfall Oil & Gas
Well Name: Windfall Oil & Gas 0
March 24, 2020

Job Information — 11.75" Surface

Open Hole	170 to 425 ft. MD
Inner Diameter	14 3/4 in.
30% Excess from 425 ft to 170 ft	143.7 ft^3
Casing	0 to 425 ft. MD
Outer Diameter	11 3/4 in.

Pump Schedule — 11.75" Surface

Fluid #	Fluid Type - Name	Surface Density (lb/gal)	Estimated Avg. Rate (bbl/min)	Downhole Volume (bbl)	Water Required (bbl.)	Top of Fluid (ft)
Spacer 1	Fresh Water	8.34	5	5.0	5.0	0
Cement	Class A	15.60	5	40.9	24.0	0
			TOTALS	**45.9**	**29.0**	
			Estimated pump time @ 4 bpm	**0.19**	hrs	
			Estimated pump time @ 8 bpm	**0.10**	hrs	

Fluids Design — 11.75" Surface

Spacer 1 Fresh Water

Fluid Density:	8.34 lb/gal
Fluid Volume:	5.0 bbls

Scavenger Class A
Base Slurry Class A Cement
2% BWOC Calcium Chloride

Slurry Density:	15.60 lb/gal
Slurry Yield:	1.20 ft^3/sk
Mixing Water	5.25 gal/sk
Total sacks	192 sks
Total barrels	40.9 bbls

Operator Name: Windfall Oil & Gas
Well Name: Windfall Oil & Gas 0
March 24, 2020

Job Information — 8.625" Intermediate

Open Hole	425 to 1000	ft. MD
Inner Diameter	11	in.
30% Excess from 1000 ft to 425 ft	190.0	ft^3
Casing	0 to 1000	ft. MD
Outer Diameter	8 5/8	in.

Pump Schedule — 8.625" Intermediate

Fluid #	Fluid Type - Name	Surface Density (lb/gal)	Estimated Avg. Rate (bbl/min)	Downhole Volume (bbl)	Water Required (bbl.)	Top of Fluid (ft)
Spacer 1	Fresh Water	8.34	5	5.0	5.0	0
Cement	Class A	15.60	5	53.7	31.5	0
			TOTALS	**58.7**	**36.5**	
			Estimated pump time @ 4 bpm	**0.24**	hrs	
			Estimated pump time @ 8 bpm	**0.12**	hrs	

Fluids Design — 8.625" Intermediate

Spacer 1 Fresh Water

Fluid Density:	8.34	lb/gal
Fluid Volume:	5.0	bbls

Scavenger Class A
Base Slurry Class A Cement
2% BWOC Calcium Chloride

Slurry Density:	15.60	lb/gal
Slurry Yield:	1.20	ft^3/sk
Mixing Water	5.25	gal/sk
Total sacks	252	sks
Total barrels	53.7	bbls

Operator Name: Windfall Oil & Gas
Well Name: Windfall Oil & Gas 0
March 24, 2020

Job Information — 4.5" Production

Open Hole	5000 to 7300 ft. MD
Inner Diameter	7 7/8 in.
15% Excess from 7300 ft to 5000 ft	602.5 ft^3
Casing	0 to 7300 ft. MD
Outer Diameter	4 1/2 in.

Pump Schedule — 4.5" Production

Fluid #	Fluid Type - Name	Surface Density (lb/gal)	Estimated Avg. Rate (bbl/min)	Downhole Volume (bbl)	Water Required (bbl.)	Top of Fluid (ft)
Spacer 1	Fresh Water	8.34	5	5.0	5.0	0
Cement	Class A	13.50	5	107.1	74.7	0
			TOTALS	**112.1**	**79.7**	
			Estimated pump time @ 4 bpm	**0.47**	hrs	
			Estimated pump time @ 8 bpm	**0.23**	hrs	

Fluids Design — 4.5" Production

Spacer 1 Fresh Water

Fluid Density:	8.34 lb/gal
Fluid Volume:	5.0 bbls

Scavenger Class A
Base Slurry Class A Cement
2% BWOC Calcium Chloride
6% BWOC Premium Gel
10% BWOW Sodium Chloride
1% BWOC Fluid Loss Latex

Slurry Density:	13.50 lb/gal
Slurry Yield:	1.93 ft^3/sk
Mixing Water	10.05 gal/sk
Total sacks	312 sks
Total barrels	107.1 bbls

Stimulation Program
Zelman#1 Injection Well

In the event stimulation is necessary to enhance injectivity the proposed treatment would be as follows: Pump 1,000 gallons MCA acid, 20,000 lbs 20/40 sand in 20,000 gallons fresh water with 150 lbs of gel down the tubing while monitoring both tubing and annulus pressures. Freshwater will be treated with Iron Control (Fe-Oxyclear) & Clay Stabilizer (Cla-Sta XP) at a rate of 1/1000 gal & 2/1000 gal respectively. (See Attachment "O" for MSDS sheets) Maximum treatment pressure would not exceed 6480 psi bottom- hole pressure. Stimulation would be performed on an as needed basis and would have prior approval of the EPA.

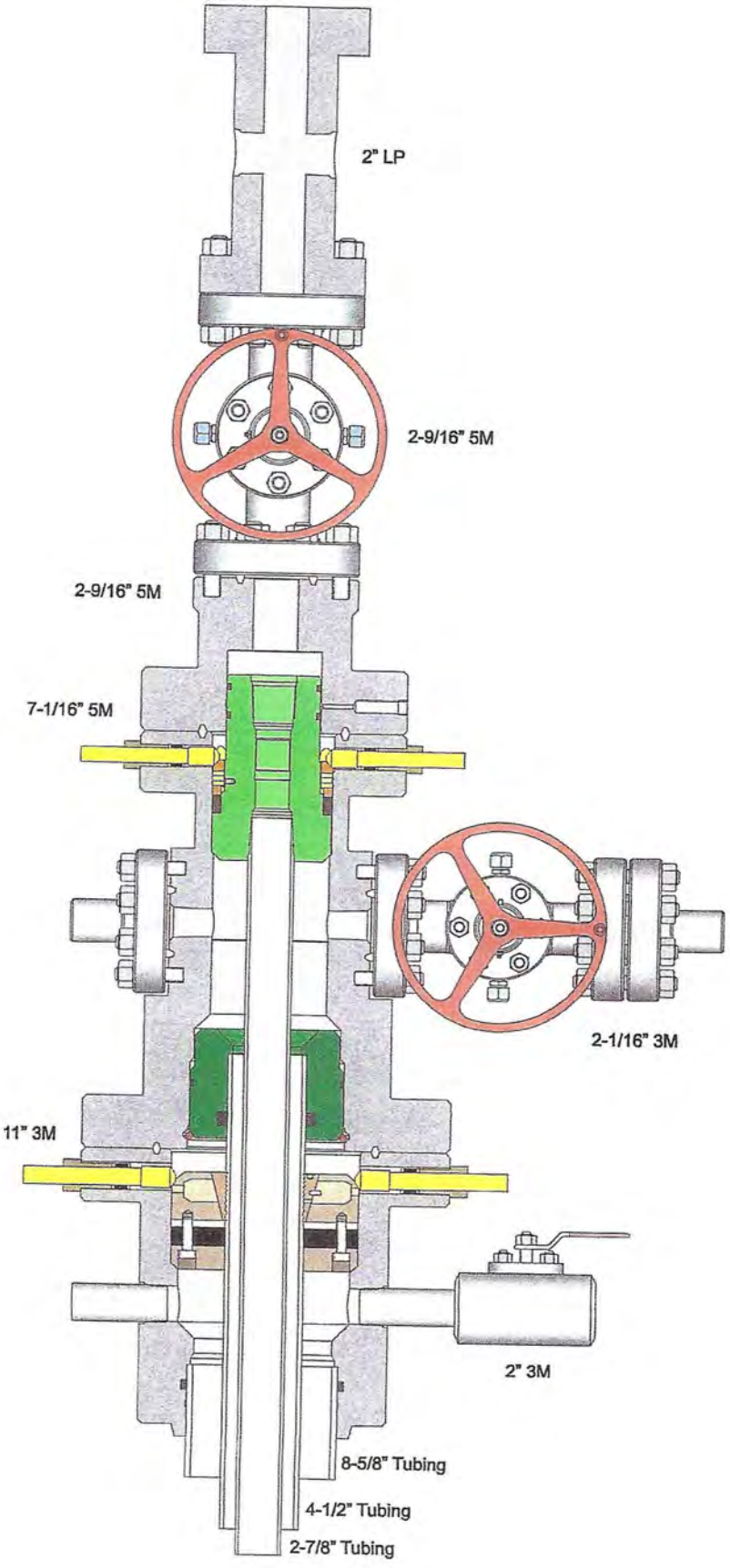
EPA Permit# PAS2D020BLCE
DEP Permit# 37-033-27255-00-00

Cactus Wellhead

Windfall Oil & Gas Inc

8-5/8" x 4-1/2" x 2-7/8" 5M

DUE27



Model A-3 Lok-Set
Retrievable Casing Packer
Product Family No. H64630

MODEL A-3™ AND AL-2™ LOK-SET RETRIEVABLE CASING PACKER

Product Family Nos. H64630 and H64628

DESCRIPTION/APPLICATION

The Model A-3 Lok-Set Packer combines advantages of a retrievable packer with features of a permanent packer. Its ability to lock down tubing forces provides for a broad range of applications, including production, injection, zone isolation, and remedial operations. The packer is set with right-hand rotation while slacking off tubing weight. Right-hand rotation with slight tension applied releases the packer.

The Model AL-2 Lok-Set Packer is similar to the Model A-3 and is recommended when a larger-than-normal bore size is required.

FEATURES/BENEFITS

- Holds pressure from above and below, without relying on set-down weight, tubing tension, or hydraulic hold-down
- Provides tubing anchoring with tension applied, suitable for pumping wells or injection, controlling tubing forces related to change fluid temperatures
- Opposed, non-transferring, dovetail slips prevent packer movement associated by changing differential pressures, while allowing the landing of the tubing in tension, neutral, or compression
- Rotational release provides ease of operation in combination with the L-10 On-OffTubing Connector
- Packing element compression is locked in by ratcheting action of lock segments, also permitting rotation in only one direction

ACCESSORIES

To provide a simple and reliable injection system for retrieving the injection string without having to unseat the packer:

- Model L-10 or L-316 On-Off Sealing Connectors, Product Family Nos. H68420 and H68422.
- Baker Blanking Plug can be used in the seating nipple profile of the on-off sealing connector to provide a means of plugging the lower zone while the tubing is being pulled.