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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

NM OIL CONSERVATION
ARTESIA DISTRICT
JUL 21 2015
RECEIVED

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

1. Operator Name and Address	2. OGRID Number
Ray Westall Operating, Inc. P.O. Box 4, Loco Hills, NM 88255	119305
	3. API Number 30-015-21711

4. Property Code	5. Property Name	6. Well No.
TBD 315051	DHY 'A' State SWD	1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
J	15	19 S	28 E		1980'	South	1650'	East	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
SWD; Cisco-Canyon	96186

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
E	S	R	S	3449'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	9857' PBTD	Canyon (Penn)	TBD	8/01/2015

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
~265'	>1 mile	n/a

☒ 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
Surface	17.5"	12.75"	40.0#	420'	400 'C'	Circ. to Surf.
Intermediate	11.0"	8.625"	32.0#	4006'	1500 'C'	Circ. to Surf.
Production *	7.875"	5.5"	17.0#	9505' / PBTD 9857'	1850 'H'	Calc. to Circ.

Casing/Cement Program: Additional Comments

*OTHER STRINGS EXISTING - New 5.5" ONLY (Spot 50 sx @ 10,007' for est. PBTD

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Hydraulic or Man./ Dbl. Blind Ram	3000 psi	5000 psi	Shaffer/ Hydril or equivalent

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: Ben Stone

Printed name: Ben Stone
Title: Agent for Ray Westall Operating, Inc.
E-mail Address: ben@sosconsulting.us
Date: 7/22/2014 Phone: 903-488-9850

OIL CONSERVATION DIVISION

Approved By: [illegible] Dade
Title: Dist II Supervisor
Approved Date: 7/22/2015 Expiration Date:
Conditions of Approval Attached

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

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

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-21711	96186	SWD; Cisco - Canyon

[4] Property Code	[5] Property Name	[6] Well Number
~~TBD~~ 315051	DHY 'A' State SWD	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
119305	Ray Westall Operating, Inc.	3449 feet

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	15	19-S	28-E		1980	South	1650	East	Eddy

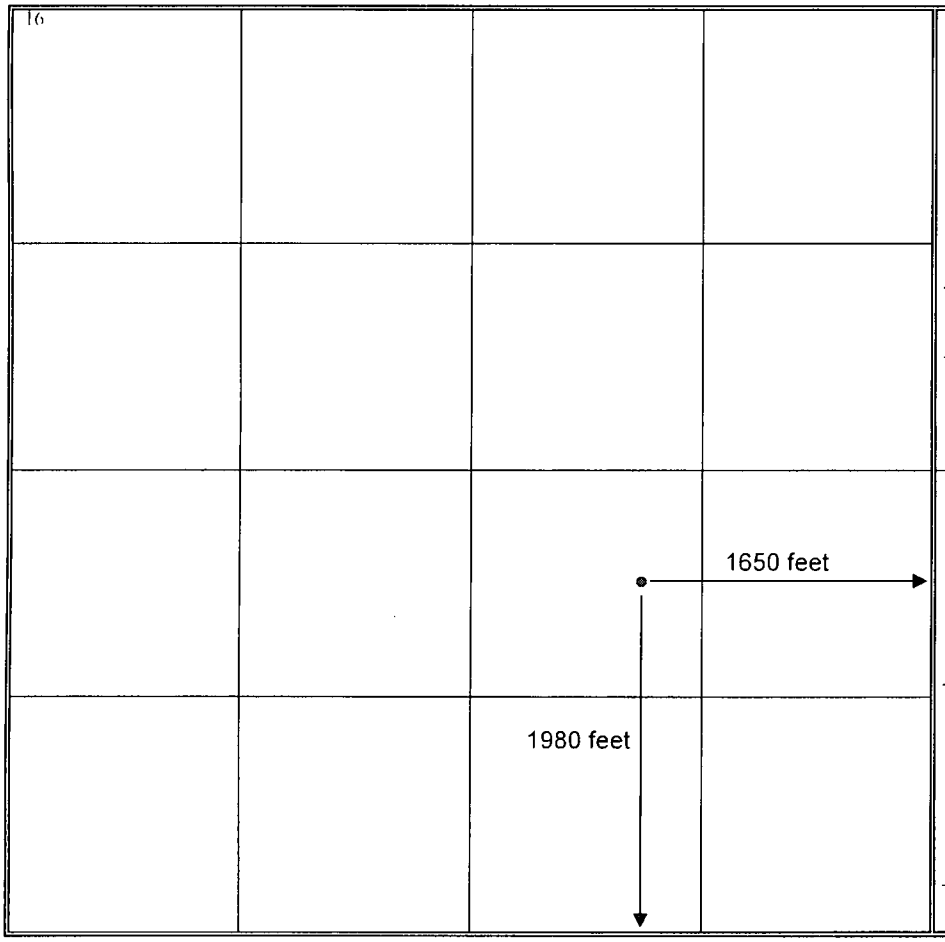
[11] Bottom Hole Location If Different From Surface

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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
n/a	n/a	n/a	SWD-1556

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.

[16]



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Signature — Date: 7/22/2015

Benjamin E. Stone
Printed Name

SOS Consulting, LLC; agent for:
Ray Westall Operating, Inc.

[18] 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.

December 30, 1975
Date of Survey

Signature and Seal of Professional Surveyor:
Herschel L. Jones

NM Cert. No.3640
Certificate Number

Ray Westall Operating, Inc.
DHY 'A' State SWD Well No.1
Section 15, Twp 19-S, Rng 28-E
Eddy County, New Mexico

Well Re-entry Program

Objective: Re-enter the existing wellbore by drilling out plugs, clean out to new PBTD of 9857', install new 5-1/2" casing, acidize and run new tubulars to configure for salt water disposal.

1. **Geologic Information** - The Cisco Formation (Upper Penn) is a gray micritic (fine grained) fossiliferous limestone with vugular porosity. The reservoirs in this area are usually limited in size with up dip porosity loss due to shelf margin carbonate build up.

The [Pennsylvanian] Canyon formation consists of similarly medium-grained carbonates, primarily dolomite and porous and permeable sandstone interbedded with shale and is generally 150 to 200 feet in thickness.

The combined zones offer good porosity in the proposed injection interval located from 9505 feet to 9857 feet with some very good porosity interspersed throughout the overall interval.

The Cisco is overlain by the Wolfcamp and the Canyon is underlain by the Strawn and Atoka. (See Pool Map and Data exhibit included.)

Fresh water in the area is generally available from the Santa Rosa formation (Capitan Basin). Based on State Engineer's records for a water well in Section 9, Twp 19S, Rng 28E, groundwater is at a depth to water of 265 feet.

Formation Tops

Yates	808
Queen	1675
San Andres	2468
Bone Spring	4616
Wolfcamp	8808
Canyon	9720
Strawn	9980
Atoka	10280

2. **Completion Procedure**

a) MIRU WSU, reverse unit and associated equipment. Install B.O.P. RIH with bit and collars to drill out plugs.
b) D/O & C/O plugs to apprx. 10,000'. Spot 50 sx Cmt @ 10,007' to 9857' PBTD.
c) Run new 5.5" casing – set @ 9505' and cement w/ 1850 sx. 2 Stg w/ DV apprx. 5500'.
d) Acidize w/ ~2500 gals HCl per 1000'. Swab and/or circulate hole clean.
e) RIH with nickel plated 5.5" or equiv. VFE retrievable packer or equivalent on 2.875" or 3.5" IPC or equiv. tubing w/ PKR @ 9410'+, pump clean fresh water containing corrosion inhibitor, biocide and oxygen scavenger down annulus, set packer. Prepare to run MIT test and notify OCD to witness 24 hours in advance.
f) Build injection facility and start water disposal. Per SWD-1556; limit injection pressure to 1900 psi.

Well Re-entry Program (cont.)

3. **Tubular program** - The well casing is set as described above. (See attached Proposed Well Schematic) 2-7/8" (3.5" optionally) internally coated tubing will be run and set in a packer located at approximately 9410' (within 100' of the uppermost injection – casing shoe at 9505').

4. **Cementing Program** - Existing Surface and Intermediate casing strings were all circulated to surface during the original well drilling and completion operations as follows:

Surface	11.75"	48.0#	14.75" hole	666'	350 sx 'C'	Circ to Surf
Intermediate	8.625"	32.0#	11.0" hole	4006'	1350 sx 'C'	Circ to Surf
Production	5.5"	17.0#	7.875" hole	9505'	1850 sx 'H'	Calc. to Circ.
Spot 50 sx cement for estimated 9857' PBTD						

5. **Pressure Control** - BOP diagram is attached to this application. All BOP and related equipment shall comply with well control requirements as described NMOCD rules and regulations. Minimum working pressure of the BOP and related equipment required for the drillout shall be 3000 psi. OCD will be notified a minimum of 4 hours prior to BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup or J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD Artesia district office. The BOP test(s) will be conducted at:

a) Installation;
b) after equipment or configuration changes;
c) at 30 days from any previous test, and;
d) anytime operations warrant, such as well conditions

6. **Mud Circulation System** - the plugs will be drilled with 8.4 lb/gal fresh water looped through the reverse unit with all cutting recovered for disposal. Visual inspection will be made by personnel while reverse unit is in operation so cement plug cuttings and potential losses are witnessed and acted upon.

7. **Auxiliary Well Control and Monitoring** - Not Applicable

8. **H_2S Safety** - There is a low risk of H2S in this area. The operator will comply with the provisions of company H_2S contingency plan as applicable. All personnel will wear monitoring devices and a wind direction sock will be placed on location.

9. **Logging, Coring and Testing** - Ray Westall Operating is not anticipating running additional logs. No corings or drill tests will be conducted. (The well may potentially be step rate tested in the future if additional injection pressures are required.)

10. **Potential Hazards** - No abnormal pressures or temperatures are expected. No loss of circulation is expected to occur. All personnel will be familiar with the safe operation of the equipment being used to drillout and reenter this well. The maximum anticipated bottom hole pressure is 4500 psi and the maximum anticipated bottom hole temperature is 130° F.

11. **Waste Management** - All drill cuttings and other wastes associated with the re-entry and drill out operations will be transported to a commercial surface waste disposal facility permitted by the Environmental Bureau of the New Mexico Oil Conservation Division.

12. **Anticipated Start Date** – Ready now – MIRU 8/01/2015. Completion of the well operations will take two to three weeks. Installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval.

Well Re-entry Program (cont.)

event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment. At the time of this submittal, the anticipated start date is:

August 1, 2015.

13. **Configure for Salt Water Disposal** – SWD Permit No. SWD-1556. Prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the following tasks: drillout and workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity. Anticipated daily volume is ~5,000 bpd at a maximum surface injection pressure of 1900 psi.

CURRENT CONFIGURATION

PLUGGED WELL SCHEMATIC

East Millman Unit No.219

(Formerly DHY 'A' State No.1)

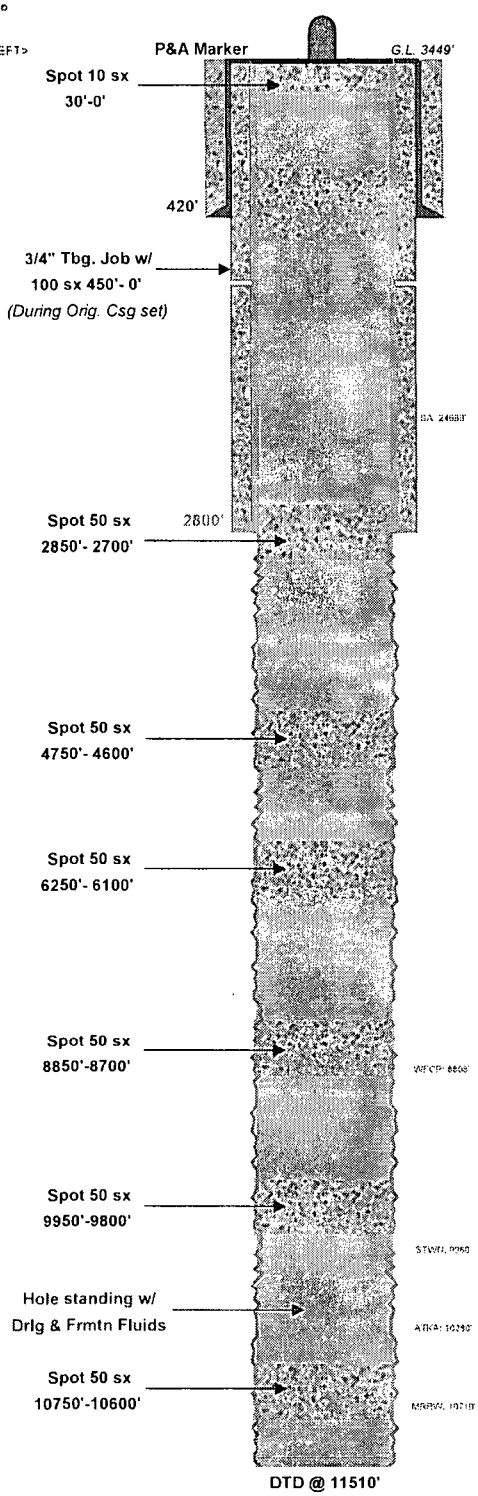
API 30-015-21711

1980' FSL & 1650' FEL, SEC. 15-T19S-R28E
EDDY COUNTY, NEW MEXICO

Spud Date: 1/26/1976
P&A Date: 3/17/1976

Well Plugged by:
Depco, Inc.

<PLUGGING ITEMS LISTED LEFT>



<PRE-P&A EXISTING ITEMS LISTED RIGHT>

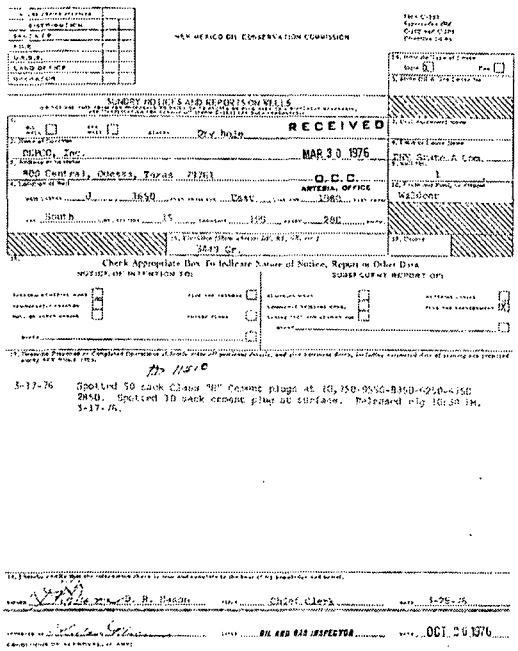
Surface Casing

12.75", 40.0# Csg. (17.5" Hole) @420'
400 sx - Circulated to Surface

Intermediate Casing

8.625", 24.0 & 32.0# Csg. (11.0" Hole) @ 2800'
1500 sx - TOC @ 590' by Temp*
Came back w/ 100 sx thru 3/4" Job in Annulus - Circ. to Surf.

<P&A SUBSEQUENT SUNDRY>


NEW MEXICO OIL CONSERVATION COMMISSION
SUNDRY NOTICES AND REPORTS ON WELLS
RECEIVED
MAR 30 1976
O. C. C.
ARTESIA, OFFICE
Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
3-17-76 Spotted 50 sack Class "H" Cement plugs at 10,750-9550-8350-6250-6150-2850. Spotted 10 sack cement plug at surface. Released rig 10:30 PM, 3-17-76.
Chief Clerk
OIL AND GAS INSPECTOR
OCT 26 1976

Production Casing - NEVER SET

Drilled as Morrow Gas well - non-economic
(7.875" Hole Size to 11,510')

SOS Consulting, LLC
Drawn by, Ben Stone, 4/10/2015

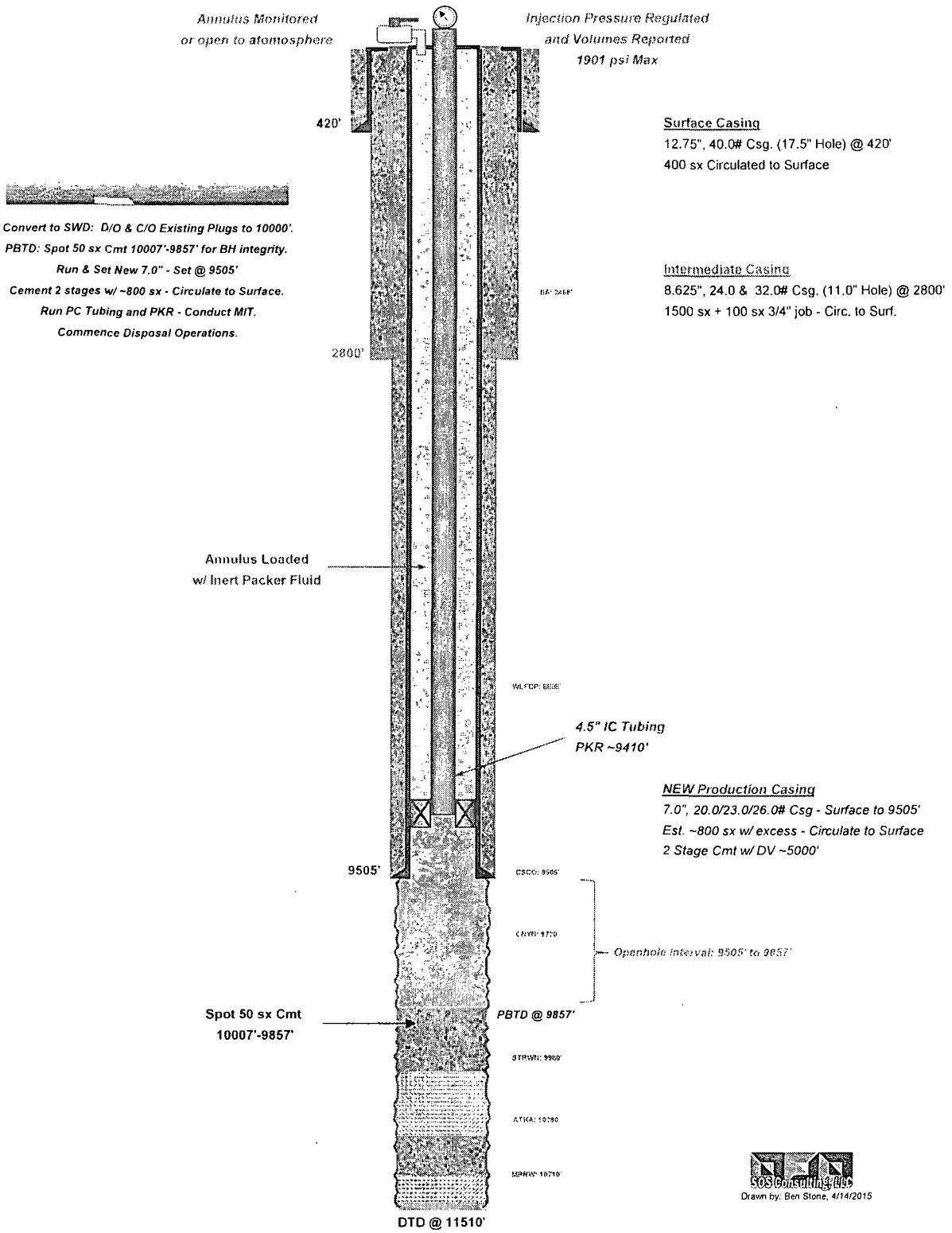
WELL SCHEMATIC - PROPOSED
DHY 'A' State Well No.1 SWD

(Sundry for Name Change Filed w/ Artesia OCD District Office)

API 30-015-21711

1980' FSL & 1650' FEL, SEC. 15-T19S-R28E
EDDY COUNTY, NEW MEXICO

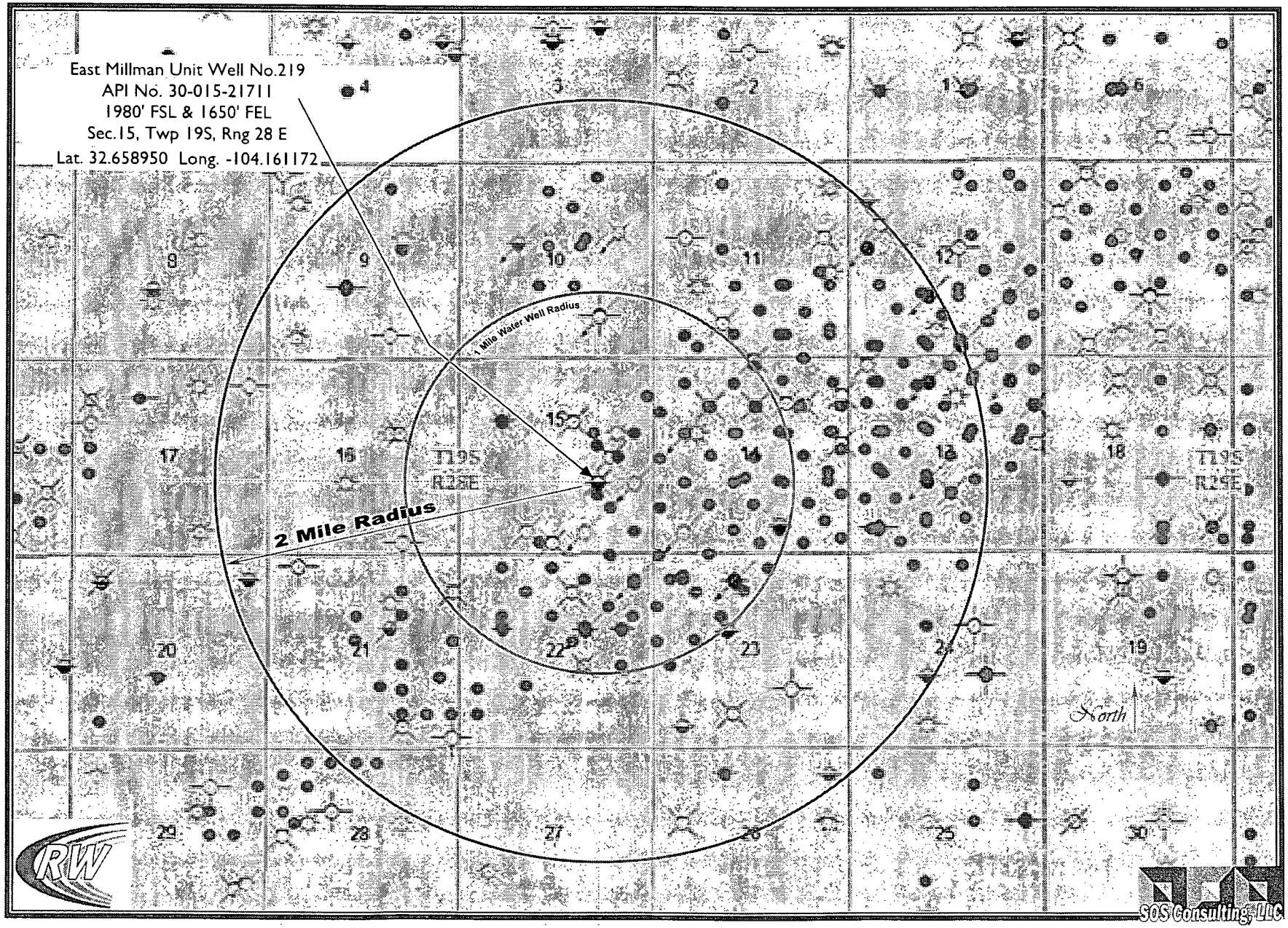
P&A Date: 3/17/1976
Re-Entry Date: ~6/01/2015



Drawn by: Ben Stone, 4/14/2015

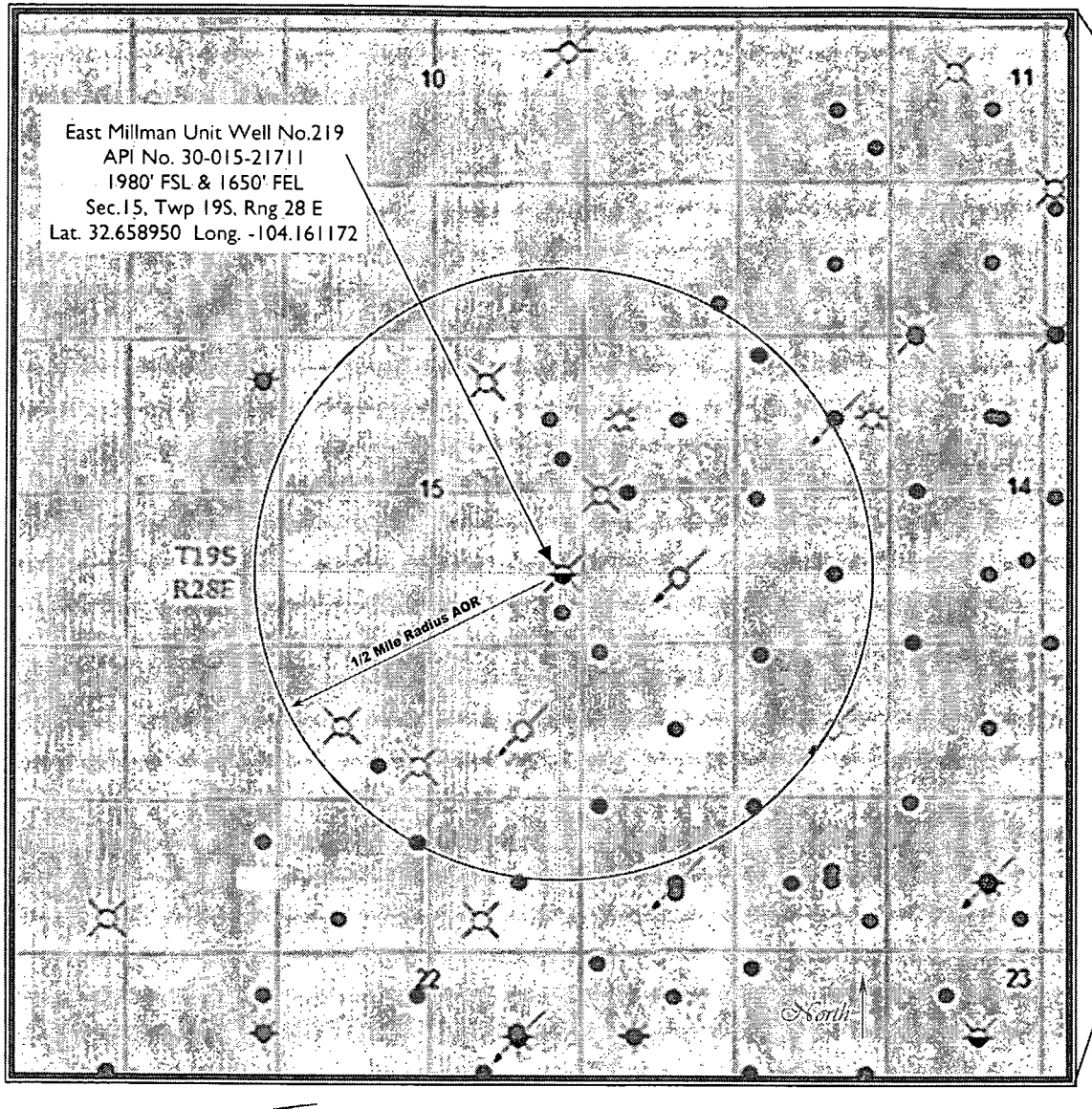
East Millman Unit No.219 - Area of Review / 2 Miles + 1 Mile WW

(Attachment to NMOCD Form C-108 - Item V)

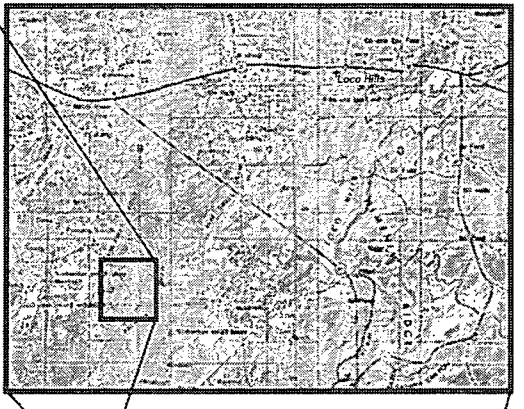


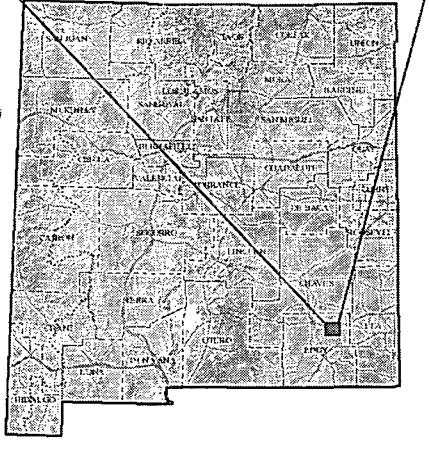
East Millman Unit Well No.219 - Area of Review / Overview Map

(Attachment to NMOCD Form C-108 - Item V)



~18.1 miles Southwest
of Loco Hills, NM





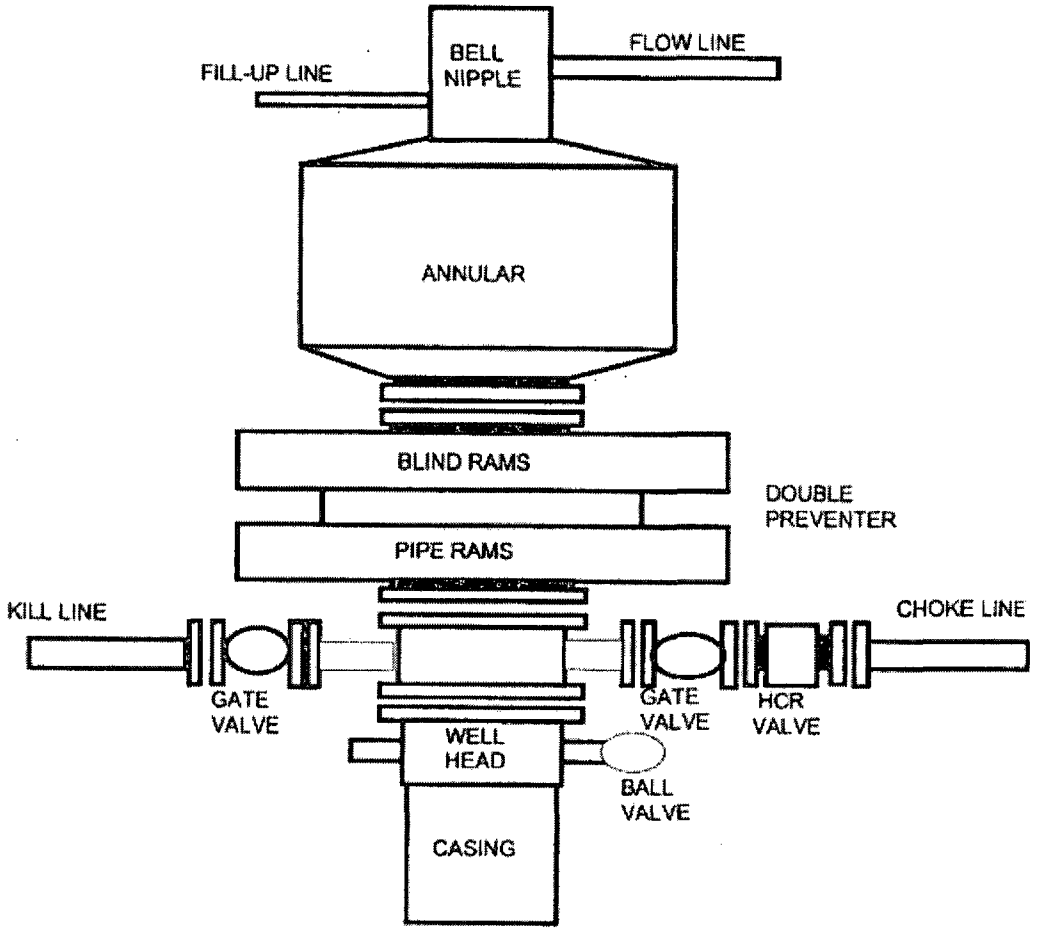
Eddy County, New Mexico

RAY WESTALL OPERATING, INC.

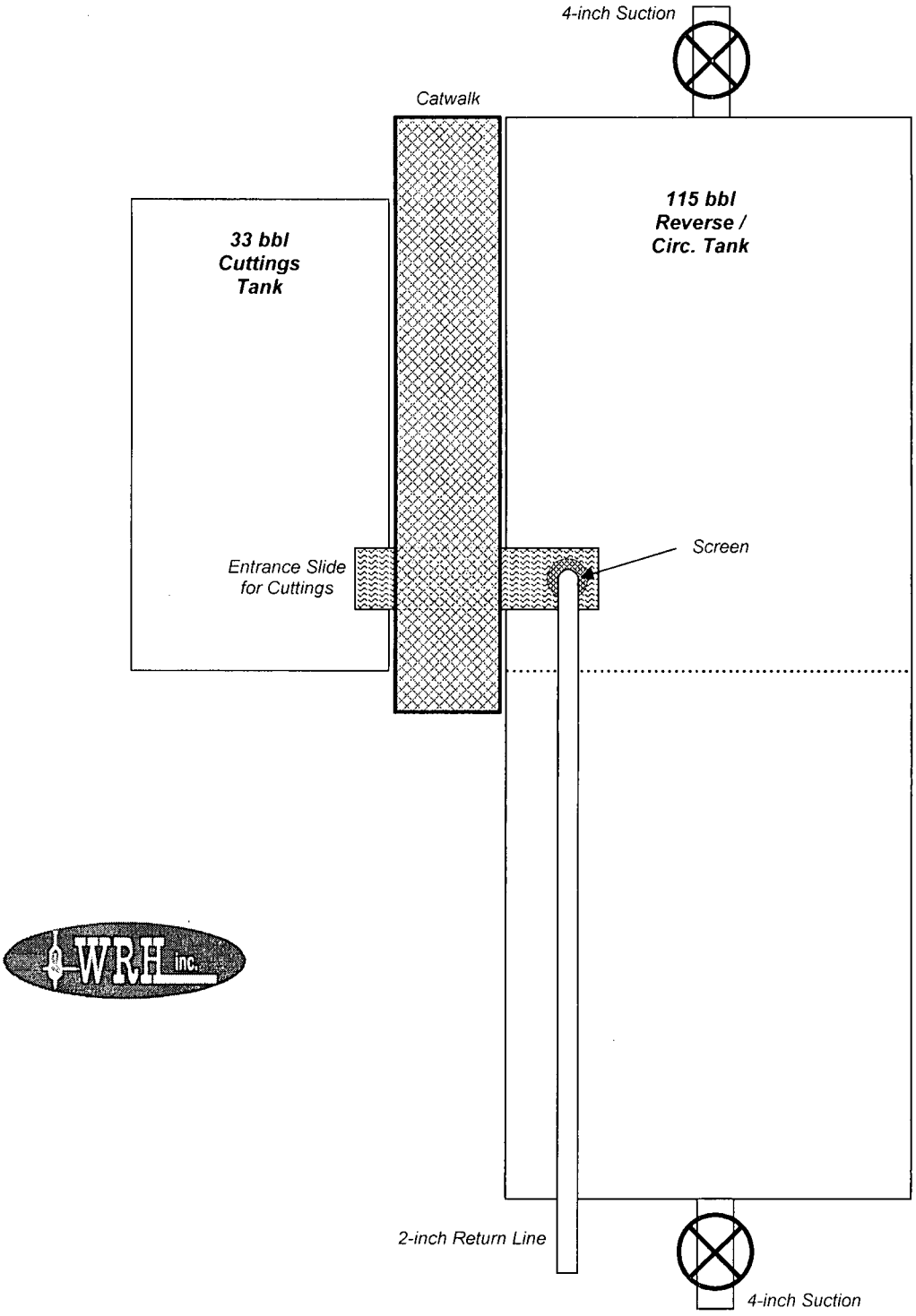
SOS Consulting, LLC

BLOWOUT PREVENTER DIAGRAM

3000 PSI WORKING PRESSURE



Reverse / Circulation Tank for Workovers & Drillouts



Standard Operating Procedure - Re-entry
Closed-Loop Reverse Unit Diagram

1. Blow Out Preventer tested prior to any operations. Notify OCD at least 4 hours prior.

2. Visual monitoring maintained on returns. Proceed with drillout operations accordingly.

3. Cuttings / waste hauled to specified facility. CRI - LEA COUNTY

4. Spills contained & cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify OCD within 24 hours. Remediation started ASAP if required. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.

5. Subsequent sundry / forms filed as needed - well returned to service.