Submit 1 Copy To Appropriate District 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

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
Revised July 18, 2013

WELL API NO. 30-015-04956

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No.

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.)

7. Lease Name or Unit Agreement Name: North Square Lake Unit

1. Type of Well: Oil Well [X] Gas Well [ ] Other

8. Well Number 148

2. Name of Operator: Memorial Production Operating, LLC

9. OGRID Number 303900

3. Address of Operator: 1301 McKinney, Suite 2100 Houston, TX 77010

10. Pool name or Wildcat: Seven Rivers

4. Well Location
Unit Letter I : 1980 feet from the South line and 660 feet from the East line
Section 32 Township 16S Range 31E NMPM Eddy County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3923'

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	P AND A	[ ]
PULL OR ALTER CASING	[ ]	MULTIPLE COMPL	[ ]	CASING/CEMENT JOB	[ ]		
DOWNHOLE COMMINGLE	[ ]						
CLOSED-LOOP SYSTEM	[ ]						
OTHER:		Recompletion	[X]	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.

Please see attached recompletion procedure, as well as Current & Proposed wellbore diagrams.

Recompletion to new reservoir. C-102 attached.

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 23 2015
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Spud Date: Rig Release Date:

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

SIGNATURE Adonya Dryden TITLE Regulatory Agent DATE 1-22-2015

Type or print name Adonya Dryden E-mail address: adonya.dryden@brammer.com PHONE: 318-429-2277

For State Use Only

APPROVED BY: TITLE District Supervisor DATE Jan 23, 2015

Conditions of Approval (if any):

Memorial
Production Partners

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 23 2015

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NSLU #148 RECOMPLETION PROCEDURE

Well Information	
API Number	30-015-04956
AFE Number	ORC-2906-00-01
Cost Estimate	$243,500
Wellbore Fluid	FSW

Existing Tubing BHA		ID	Coupling OD
Production Tubing	2-3/8" , --- ppf	----	----

Wellbore Information	
Ground Level / KB	3923'/-----'
PBTD (MD/TVD)	3494'
TD (MD/TvD)	3520'
Production Perfs	3307'-11' / 3346'-50'/ 3414'-21'/ 3489'-98'

Existing Casing and Tubing Specifications

Csg/Tbg Size (in)	MD (ft) Top	MD (ft) Shoe	Weight (lbs/ft)	ID (in)	Drift ID (in)	Grade	Hole Size (in)	Connection Top Conn.	Connection O. D. (in)	Performance Ratings Burst (psi)	Performance Ratings Collapse (psi)	Performance Ratings Tension (kips)
8-5/8"	0	350	24	8.097	7.972	J-55	12.25		9.625	2950	1370	
5-1/2	0	3520	14.0	5.012	4.887	J-55	7-7/8		6.050	4270	3120	172

Directions

PROCEDURE

Perform Safety Checks and Safety Meeting

1) Perform a safety meeting prior to rigging up ANY equipment on location. Discuss the job procedure and objective with all personnel on location. Document the safety meeting on the daily report. Make note of all potential risks/hazards, and clearly identify an emergency route and emergency vehicle. Also make note of any new or inexperienced personnel on location.
2) Check pressures on tubing, production casing and surface casing. Record pressures on morning reports.

Workover Rig Work

3) MIRU workover rig, MI & rack 2500' of 2-7/8" N-80 rental tubing and six 3-1/8" drill collars.
4) Remove horsehead from pumping unit.
5) Unseat pump and POOH laying down the rods and pump. Visually inspect rods when POOH. POOH W/ 2-3/8" tbg. Scan tbg and tally when POOH. Set aside any bad jts.
6) PU & RIH W/4-7/8" Bit, scraper & six 3-1/8" drill collars and 2-7/8" N-80 rental tbg. RIH to 2375'. POOH.

Memorial
Production Partners

7) MIRU EWL. RIH W/GR/CCL/CBL. Log from 2365'-1865' (assuming 500' minimum). Check to see if we have any cmt over 500' interval. POOH.
8) RIH 5-1/2" x 2-7/8" mechanical set CIBP, retrievable packer and 2-7/8" N-80 tbg. Set CIBP at 2365'.
9) Pick up one stand, set packer and pressure up on tbg to 500# to make sure CIBP is holding. Pressure up on tbg/casing annulus to 300# to make sure casing holds pressure. If casing does not hold pressure continue to move packer up the hole and test until hole(s) depth(s) are identified. POOH. If casing tests proceed with step 9. If casing does not test and hole is above 1000' proceed with step 9. If casing does not test and hole is below 1000' contact engineer to discuss plan going forward.
10) MIRU EWL. RIH W/CCL/Casing gun (4 SPF, 90 deg Phase). Perforate 2355'-2356' (Note fluid level change after perforating). POOH. RDMO EWL.
11) MIRU cementers & wtr trucks. RIH W/packer and 2-7/8" N-80 tbg. Set packer at 2160'. Attempt to circulate FSW up production/surface casing annulus. Note injection rate/pressures.
12) Pump 200 sx Class "C" 2% CaCl down the tbg displacing tbg with 13 BBLS wtr to clear pckr. Stage 4 more BBLS until 1000 psi is obtained. Shut well in.
13) WOC for 24-48 hrs.
14) Release packer. RIH W/tbg to tag TOC. POOH W/ tbg and packer. If TOC is 2275' or deeper skip step number 14.
15) MIRU swivel and reverse unit. RIH W/bit, scraper and 2-7/8" tbg. Drill out cmt to 2300'. Circulate well clean. POOH.
16) MIRU EWL. RIH W/CCL/Casing gun (1 SPF, 180 deg Phasing) and perforate 2249'-56', 2197'-2203', 2145'-2149', 2137'-40', 2129'-33', 2121'-25', 2110'-14'. POOH.
17) RIH W/2-7/8" tbg and packer. Set packer at 2075'. Acidize with 2500 gallons of 15% HCL acid.
18) Swab test well to determine oil cut, fluid level and fluid feed-in. At this point if frac crew is available, proceed with frac stimulation as per design and skip to step 22. If frac crew is not available proceed with step 18.
19) Release packer and lay down 2-7/8" N-80 rental tbg and packer for rental release. RIH 2-3/8" tbg to 2260'. RIH W/exchanged pump and rods. Seat pump and make sure pump action is working. Put horsehead back on pumping unit. Hang rods and start pumping unit.
20) RDMO WOR.
21) When able to secure a frac date, MIRU WOR, unseat pump and POOH W/rods and pump. MI & PU 2-7/8" N-80 rental string and packer. RIH W/tbg and packer and set packer at 2075'.
22) MIRU frac company and stimulate as per frac design.
23) Flow back well once pumping equipment is off location. Once well is dead release packer and POOH with rental 2-7/8" N-80 tbg and packer (have tbg/pckr picked up).
24) RIH 2-3/8" tbg to 2260'. RIH W/Exchanged Pump and rods. Seat pump and make sure pump action is working. Put horsehead back on pumping unit. Hang rods and start pumping unit.
25) RDMO WOR.

Memorial Company Personnel

NAME	TITLE	OFFICE #	CELLULAR #
Andrew Kobelan	Operations Engineer	832-408-8604	281-684-7271

Prepared by: Andrew Kobelan

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ARTESIA DISTRICT
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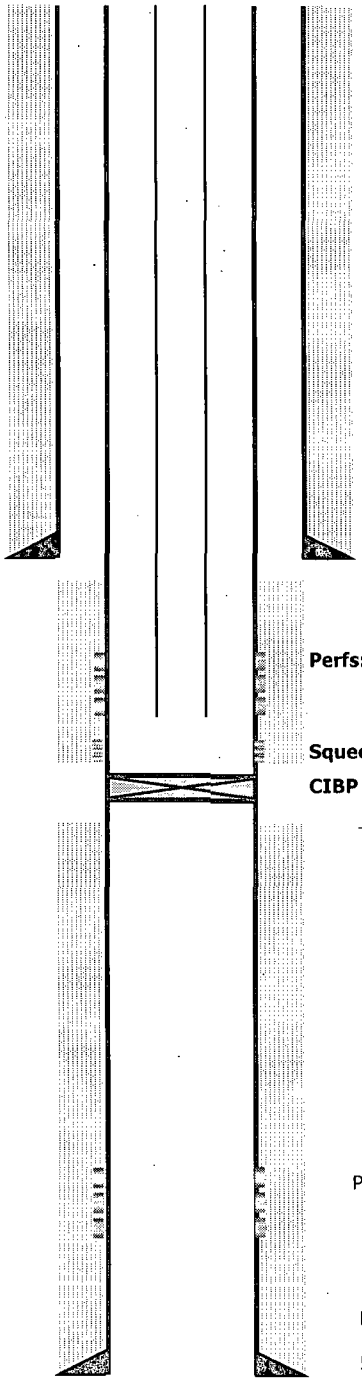

WELL NAME:	**NSLU #148**				FIELD:	**North Square Lake**	
LOCATION:	**Sec. 32, 16 S, 31 E**				API #:	**30-015-04956**	
COUNTY:	**Eddy**		ST:	**NM**	SPUD DATE:	**01/01/62**	
KB: **n/a**	GL:	**3923**	TD:	**3520**	PBTD:	**3510**	
LAST UPDATED:	**12/30/14**		BY:	**Andrew Kobelan**			

CASING DETAILS

PURPOSE	SIZE	WEIGHT	GRADE	SET DEPTH
SURFACE	8-5/8"	24#	J-55	350
INTERMEDIATE				
PRODUCTION	5 1/2"	14#	J-55	3520
LINER				

TUBING DETAILS

DESCRIPTION	SIZE	WEIGHT	GRADE	SET DEPTH
	2-3/8"		J-55	

8-5/8" 24# J-55 @ 350' cemented w/250 sx (circ)

Perfs: 2110'-14, 2121'-25', 2129'-33', 2137'-40', 2145'-49', 2197'-2203', 2249'-56'
(1 SPF, 180 deg phasing)

Squeeze Perfs: 2355'-56' (4 SPF, 90 deg phasing)

CIBP set @ 2365'

TOC @ 2900' (Temp Sruvey)

Perfs: 3307'-11: Frac W/ 12.6M gals RO + 42M # 20/40. 10.4 BPM @ 4800 psi
3346'-50': Frac W/ 10M gals RO + 30.1M # 20/40. 11.8 BPM @ 5200 psi
3414'-21': No frac, pressure too high
3489'-98': Frac W/ 15M gals RO + 48.22M # 20/40. 11.6 BPM @ 5200 psi
TOTAL FRAC: 38,440 gals RO + 120,700 # 20/40

EOT @ 3492'

5 1/2" 14# @ 3520' w/175 sx

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ARTESIA DISTRICT
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WELL NAME:	**NSLU #148**			FIELD:	**North Square Lake**
LOCATION:	**Sec. 32, 16 S, 31 E**			API #:	**30-015-04956**
COUNTY:	**Eddy**		ST:	**NM**	SPUD DATE: **01/01/62**
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PURPOSE	SIZE	WEIGHT	GRADE	SET DEPTH
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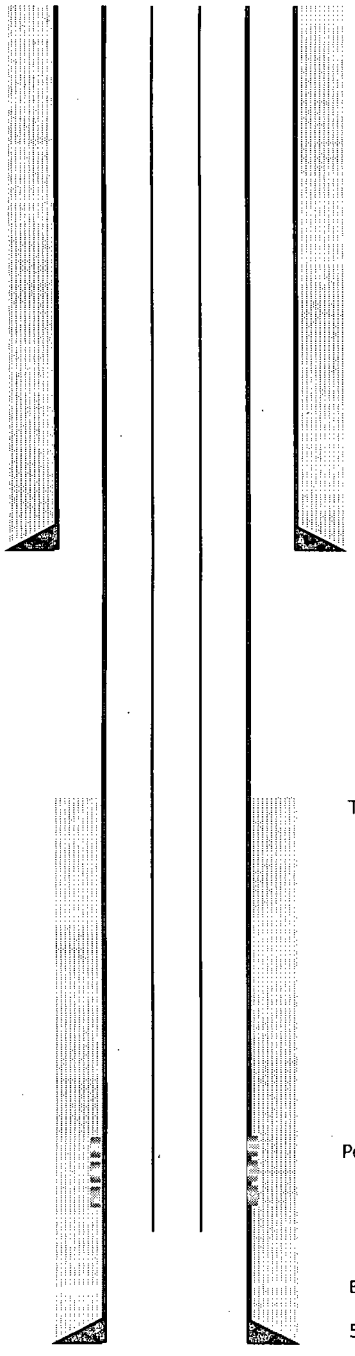
INTERMEDIATE				
PRODUCTION	5 1/2"	14#	J-55	3520
LINER				

TUBING DETAILS

DESCRIPTION	SIZE	WEIGHT	GRADE	SET DEPTH
	2-3/8"		J-55	3,492.00



8-5/8" 24# J-55 @ 350' cemented w/250 sx (circ)

TOC @ 2900' (Temp Sruvey)

Perfs: 3307'-11: Frac W/ 12.6M gals RO + 42M # 20/40. 10.4 BPM @ 4800 ps
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TOTAL FRAC: 38,440 gals RO + 120,700 # 20/40

EOT @ 3492'

5 1/2" 14# @ 3520' w/175 sx

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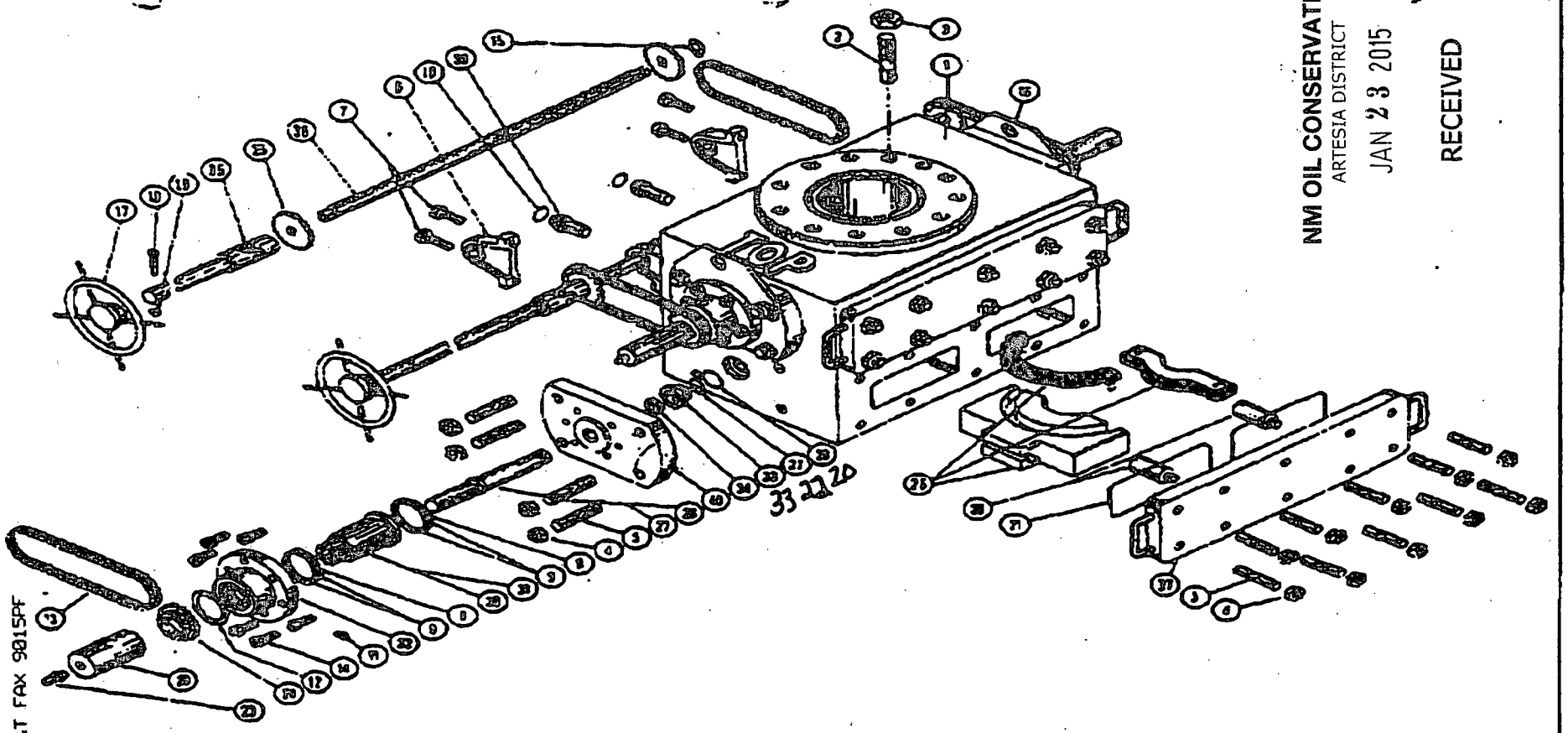

ITEM	PART #	QUAN	PRICE Ea	DESCRIPTION	ITEM	PART #	QUAN	PRICE Ea	DESCRIPTION	ITEM	PART #	QUAN	PRICE Ea	DESCRIPTION
1	04-049-10	1	$6,350.00	Body	16	10-000-64	2	$85.00	Lifting Plate	31	13-119-28	2	$268.00	Sm. Brg. Housing-left
2	43-082-64	24	$3.50	1 1/8" x 5 1/4" T.E. Stud Gr. B-7	17	28-131-70	2	$125.00	32" Hand Wheel	32	06-129-43	4	$280.00	Bearing Housing
3	49-082-73	24	$2.80	1 1/8" Hex nut, Gr. 2H	18	44-087-34	2	$2.00	3/8" x 2 1/2" Hex Hd. CapS	33	11-116-32	4	$80.00	Packing Gland
4	49-081-73	36	$2.40	1" Hex. Nut. Gr. 2H	19	49-087-73	2	$2.00	3/8" Hex Nut, Gr. 2H	34	75-112-32	4	$35.00	Packing Ass'y.ZZS-FFV
5	43-081-45	36	$3.40	1" x 4 1/4" T.E. Stud Gr. B-7	20	55-112-72	4	$2.50	O-ring 2-338	35	32-105-72	2	$106.00	U-joint w/ Shaft
6	89-087-00	4	$48.50	1 3/4" Pillow Block Bearing	21	56-083-72	4	$15.00	O-Ring 2-442	36	29-087-71	2	$134.00	Drive Shaft
7	44-088-30	8	$1.40	1/2" x 2" Hex HD.Capscrew	22	60-088-72	4	$10.00	Wiper Type D-2250	37	12-000-00	2	$380.00	Pressure Plate
8	61-000-00	8	$30.00	Bearing NTA-6074	23	65-000-00	4	$3.00	1/8" Grease Fitting	38	27-103-73	4	$40.00	Ram Guide Pin
9	62-000-00	16	$18.00	Bearing Race TRC-6074	24	33-122-71	4	$52.00	Sprocket F/ Brg. Housing	39	26-101-69	4	$220.00	Alignment Pins
10	52-088-72	4	$3.00	O-Ring 2-226	25	32-128-71	4	$48.00	Sprocket F/ Drive Shaft	40	09-000-32	2	$335.00	End Cover- Left
11	66-000-00	4	$3.00	1/4" Grease Fitting	26	Varies	4	$105.00	Ram Stock Set	40	09-000-32	2	$335.00	End Cover- Right
12	07-119-41	4	$48.00	Barrier Ring	27	40-104-69	2	$285.00	Ram Shaft Left Hand	NA	Not Shown	2	$96.00	Guards
13	63-000-00	4	$30.00	Chain	28	41-104-69	2	$285.00	Ram Shaft- Right Hand	26	Varies	2	$45.00	Face Seals
14	45-088-26	24	$1.75	3/4" x 1 1/2" Soc. Hd. CapScrew	29	15-111-32	4	$105.00	Thread Protector	29	36-048-00	4	$35.00	Top Seals
15	70-000-00	2	$2.50	Snap Ring N-5100-125	30	14-119-29	2	$269.00	Sm. Brg. Housing-Right	28	Varies	2	$900.00	Rambloc

Stands 6'

APR 24 '00 03:47PM AT&T FAX 9815PF

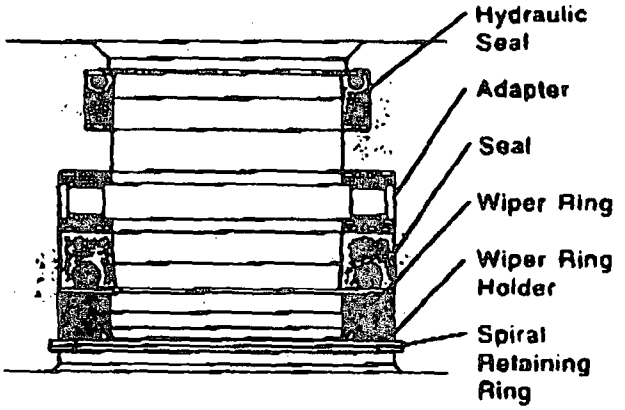

Figure 5-2
Ram Shaft Seal Assembly (P/N 185174)

Table 5-3
Ram Shaft Seal Assembly (P/N 185174)

Item	Part Number	Qty.	Description
1	141365	1	Spiral Retaining Ring
2	185172	1	Wiper Ring Holder
3	032005	1	Wiper Ring
4	032004	1	Seal
5	185173	1	Adapter
6	032009	1	Hydraulic Seal

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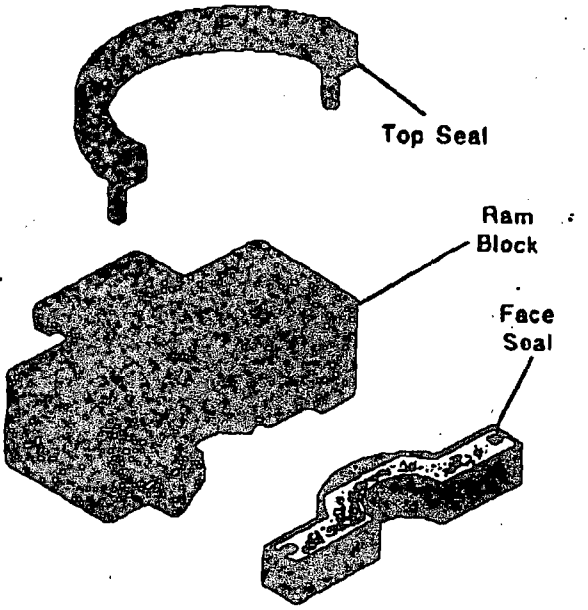

Figure 5-3
Pipe Ram Block Assembly

Table 5-4
Chasovoy Pipe Ram Assembly

Pipe OD	Complete Assembly	Ram Block	Face Seal Assembly	Top Seal Assembly
7⅛", 5,000 psi (180 mm, 340 atm)				
CSO	722224	722156	722183	722181
1¼", 32 mm	722259	722285	722286	722181
1.315", 33 mm	722225	722157	722184	722181
1.660", 42 mm	722226	722158	722185	722181
1.900", 48 mm	722227	722159	722186	722181
2⅛", 52 mm	722228	722160	722187	722181
2⅜", 60 mm	722229	722161	722188	722181
2⅞", 73 mm	722230	722162	722189	722181
3½", 89 mm	722231	722163	722190	722181
4", 102 mm	722232	722164	722191	722181
4½", 114 mm	722233	722165	722192	722181
5", 127 mm	722234	722166	722193	722181
5½", 140 mm	722235	722167	722194	722181
7⅛", 5,000 psi (200 mm, 340 atm)				
2⅞", 73 mm	185104	185138	185144	185140
3½", 89 mm	185103	185137	185143	185140
4½", 114 mm	185102	185136	185142	185140
6⅝", 168 mm	185101	185135	185141	185140

District I
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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 August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-04956	98112	WC-015 G-01 S163132I; SEVEN RIVERS

[4] Property Code	[5] Property Name	[6] Well Number
	NORTH SQUARE LAKE UNIT	148

[7] OGRID No.	[8] Operator Name	[9] Elevation
303900	MEMORIAL PRODUCTION OPERATING, LLC	3923'

[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
I	32	16S	31E		1980	SOUTH	660	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.

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]

660'

1980'

[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.

Adonya Dryden 1-22-2015

Signature Date

ADONYA DRYDEN

Printed Name

adonya.dryden@brammer.com

E-mail Address

[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.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

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