

The Western Company of North America TREATMENT REPORT		Date <u>8-14-80</u> Western District <u>Farmington (31)</u> # Report <u>256397</u> Operator <u>JOHN H. HILL, ETAL</u> Well No. <u>41325</u> Lease <u>Newsom</u> Field <u>Ballard P.C.</u> Section <u>20, 26n, 8w</u> County <u>San Juan</u> State <u>New Mexico</u> Stage Number <u>I</u> This Zone <u> </u> This Well ☒																																																								
WELL DATA: CG ☐ NG ☒ NC ☐ OO ☐ WD ☐ IW ☐ Misc. ☐ Depth TD <u>2400</u> Formation <u>Pictured Cliff</u> Size Tubing <u> </u> Tubing Perf. <u> </u> Type Packer <u> </u> Set At <u> </u> Size Casing <u>2-7/8</u> Wt. <u>6.5</u> Set From <u>surface</u> To <u>2400</u> Size Liner <u> </u> Wt. <u> </u> Liner Set From <u> </u> To <u> </u> Open Hole Size <u> </u> From <u> </u> To <u> </u> Casing Perforations: Size <u>.43</u> Holes Per Foot <u>1</u> Intervals <u>2190, 2192, 2194, 2200, 2202, 2204, 2206, 2220, 2222, 2224, 2226, 2232, 2234, 2236 (14 holes)</u> Previous Treatment <u>None</u> Prior Production <u>None</u>																																																										
TREATMENT DATA: Pad Used: Yes ☒ No ☐ Pad Type <u>70% Foam</u> Treating Fluid Type: Oil ☐ Water ☐ Acid ☐ Misc. ☐ Foam ☒ Emulsion ☐ Treating Fluid Volume Gals. <u>8505</u> Fluid Description <u>70% Foam</u> Total Prop Quantity <u>35,000</u> Lbs. Prop Type: Sand ☒ Beads ☐ Special ☐ None ☐ Prop Mesh Sizes, Types and Quantities <u>35,000# 10/20 sand</u> Hole Loaded With <u>dry</u> Treat Via: Tubing ☐ Casing ☒ Anul ☐ Tubing & Anul ☐ Ball Chasers <u> </u> In <u> </u> Stages of <u> </u> Types and Number of Pumps Used <u>(1) Buffalo</u> Surfactant Water <u>250 gal 15% HCl; 1280# KCl; 46 gal AtoFoam</u> Procedure <u>Breakdown with 250 gal 15% HCl; spearhead acid flush with 14.2 bbl; run 34.9 bbl pad; 10/20 @ 1#/gal for 36 bbl; 108 bbl with 10/20 @ 2#/gal; flush to top perforation with 3.4 bbl 70% Foam</u>		FLUID PUMPED AND CAPACITIES IN BBLs. Tubing Cap <u> </u> Casing Cap <u>13.9</u> Annular Cap <u> </u> Open Hole Cap <u> </u> Fluid to Load <u>20.2</u> Pad Volume <u>34.9</u> Treating Fluid <u>147.4</u> Flush <u>3.4</u> Cement <u> </u> Total to Pump <u>205.7</u>																																																								
<table><tr><th>Time</th><th>Treating Pressure-Psi</th><th>Barrels Fluid Pumped</th><th>Inj. Rate B P M</th><th>REMARKS</th></tr><tr><td>12:00</td><td>0</td><td>0</td><td>4.2</td><td>Start acid</td></tr><tr><td>12:01</td><td>0</td><td>100</td><td>4.2</td><td>All acid, start water</td></tr><tr><td>12:04</td><td>0</td><td>1500</td><td>9.1</td><td>Acid on spot, shutdown</td></tr><tr><td>1:40</td><td>0</td><td>0</td><td>4.6</td><td>Start pad</td></tr><tr><td>1:47</td><td>0</td><td>2000</td><td>4.5</td><td>Start 10/20 @ 1#/gal</td></tr><tr><td>1:38</td><td>0</td><td>2000</td><td>4.5</td><td>10/20 @ 1#/gal. on formation</td></tr><tr><td>1:45</td><td>0</td><td>2050</td><td>4.5</td><td>Start 10/20 sand @ 2#/gal</td></tr><tr><td>1:46</td><td>0</td><td>2100</td><td>4.5</td><td>10/20 sand @ 2#/gal. on formation</td></tr><tr><td>2:09</td><td>0</td><td>2100</td><td>4.5</td><td>Start flush</td></tr><tr><td>2:10</td><td>0</td><td>2100</td><td>4.5</td><td>All flush, shutdown</td></tr></table> (6) JOHN H. HILL, ETAL, Suite 140, Campbell Centre, 8350 N. Central Expressway, Dallas, Tx 75206 (2) LEON WIEDERKEHR, 7607 Brookhollow Cove, Austin, Tx 78752 (3) SUPRON ENERGY, Haskell Floorwood, Bldg 5 5th Floor, 10300 N. Central Expressway, Dallas, Tx. (2) WILLIAM MOSS/LEO PATTERSON, 3303 Lee Parkway, Dallas, Tx 75219 (2) LAURENCE H. AMOUR, JR. 1355 S. LaSalle, Chicago, Ill 60603 (2) THE WESTERN CO., Tom Larimore, Box 186, Ft. Worth, Tx 76101 (2) U.S.C.S., Box 959, Farmington, N.M. 87401 (1) N.M. OIL & GAS COMM, 1000 Rio Brazos Rd., Aztec, N.M. 87410				Time	Treating Pressure-Psi	Barrels Fluid Pumped	Inj. Rate B P M	REMARKS	12:00	0	0	4.2	Start acid	12:01	0	100	4.2	All acid, start water	12:04	0	1500	9.1	Acid on spot, shutdown	1:40	0	0	4.6	Start pad	1:47	0	2000	4.5	Start 10/20 @ 1#/gal	1:38	0	2000	4.5	10/20 @ 1#/gal. on formation	1:45	0	2050	4.5	Start 10/20 sand @ 2#/gal	1:46	0	2100	4.5	10/20 sand @ 2#/gal. on formation	2:09	0	2100	4.5	Start flush	2:10	0	2100	4.5	All flush, shutdown
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Treating Pressure: Min. <u>0</u> Max. <u>2100</u> Avg. <u>2100</u> Customer Representative <u>Herman Wallis</u> Inj. Rate on Treating Fluid <u>4.5</u> Rate on Flush <u>4.5</u> Western Representative <u>Pete Heiser</u> Avg. Inj. Rate <u>4.5</u> ISDP <u>1300</u> Flush Dens. lb/gal <u>70% Foam</u> Distribution <u>SEE ABOVE</u> Final Shut-in Pressure <u>1150</u> in <u>15</u> Minutes. Operator's Maximum Pressure <u>2500#</u> JOB NUMBER <u>588807</u> cc: <u>Farmington District</u>																																																										

