

The Western Company of North America TREATMENT REPORT		Date <u>8-14-80</u> Western District <u>Farmington (31)</u> F. Receipt <u>256623</u> Operator <u>JOHN H. HILL, ETAL</u> 41325 Lease <u>Foster</u> Well No. <u>4A</u> Field <u>Ballard</u> Location <u>4, 26n, 8w</u> County <u>San Juan</u> State <u>New Mexico</u> Stage Number <u>1</u> This Zone ☐ This Well ☒		
WELL DATA: OG ☐ NG ☒ NO ☐ OO ☐ WD ☐ IW ☐ Misc. ☐ Depth <u>12778.4690</u> Formation <u>Mesa Verde</u> Size Tubing <u>2 3/8</u> Tubing Perf. <u>-</u> Type Packer <u>Baker</u> Set At <u>4622</u> Size Casing <u>5.5</u> Wt. <u>15.5</u> Set From <u>surface</u> To <u>4892</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>34</u> Holes Per Foot <u>1</u> Intervals <u>4656, 4657, 4658, 4659, 4663, 4664, 4665, 4666, 4667, 4668</u> (10 holes)		Previous Treatment <u>None</u> Prior Production <u>None</u>		
TREATMENT DATA: Pad Used: Yes ☐ No ☒ Pad Type <u>-</u> Treating Fluid Type: Oil ☐ Water ☐ Acid ☒ Misc. ☐ Foam ☐ Emulsion ☐ Treating Fluid Volume Gals. <u>1000</u> Fluid Description <u>15% Spearhead HCl</u>		FLUID PUMPED AND CAPACITIES IN BBLs. Tubing Cap. <u>17.46</u> Casing Cap. <u>-</u> Annular Cap. <u>-</u> Open Hole Cap. <u>-</u> Fluid to Load <u>-</u> Pad Volume <u>9</u> Treating Fluid <u>24</u> Flush <u>28</u> Overflush <u>-</u> Total to Recover <u>61</u>		
Total Prop Quantity <u>-</u> Lbs. Prop Type: Sand ☐ Beads ☐ Special ☐ None ☒ Prop Mesh Sizes, Types and Quantities <u>-</u> Hole Loaded With <u>2% KCl</u> Treat Via: Tubing ☒ Casing ☐ Anul ☐ Tubing & Anul. ☐ Ball Sealers: <u>20</u> In <u>20</u> Stages of <u>1/bbl</u> Types and Number of Pumps Used: <u>(1) HNP Acidmaster</u> Auxiliary Materials <u>600# KCl; 4 gal LT-17; 1 gal L-15; 15# XR-2</u>				
Procedure <u>Spot 168 gal 15% through tubing; breakdown with 840 gal 15% with 20 ballsealers; flush acid and ballsealers with 630 gal 2% KCl.</u>				
Time	Treating Pressure-Psi Tubing Casing	Barrels Fluid Pumped	Inj. Rate B P M	REMARKS
AM <u>11:50</u>	-	-	1.2	Test lines to 4000#
<u>11:53</u>	-	-	4	Start acid spot, 15%
<u>11:59</u>	150	150	1.8	All acid, flush with 2% KCl
<u>12:03</u>	-	-	0	Acid on spot, shutdown
<u>12:10</u>	1450	1450	3	Knock off wellhead and breakout
<u>12:14</u>	3450	3450	33	Start acid and ballsealers, flush
<u>12:29</u>	2000	2000	0	Maximum pressure, shutdown
<u>12:33</u>	2200	2200	15	Start 2% KCl flush
<u>1:00</u>	-	-	0	All flushed, shutdown
(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 Fleetwood, Bldg 5 5th Floor, 10300 N. Central Expressway, Dallas, Tx 75219				
(2) WILLIAM MOSS/LEO PATTERSON, 3303 Lee Pkwy, Dallas, Tx 75219				
(2) J. A. HUMPHREY, 1100 1st Nat'l Bk Bldg, Dallas, Tx 75202				
(2) L. H. AMOUR, JR., 1355 S. LaSalle, Chicago, Ill 60603				
(2) THE WESTERN COMPANY, Tomlarimore, Box 186, Ft. Worth, Tx. 76101				
(2) U.S.G.S., Box 959, Farmington, N.M. 87401				
(1) N.M. OIL & GAS COMM, 1000 Rio Brazos Rd. Aztec, N.M. 87410				
Treating Pressure: Min. <u>1500</u> Max. <u>3450</u> Avg. <u>2500</u> Customer Representative <u>A.D. Miller</u>				
Inj. Rate on Treating Fluid <u>4</u> Rate on Flush <u>4.2</u> Western Representative <u>Ricky Kent</u>				
Avg. Inj. Rate <u>3.5</u> I.S.D.P. <u>800</u> Flush Dens. lb/gal <u>2% KCl</u> Distribution <u>SEE ABOVE</u>				
Final Shut-in Pressure <u>0</u> in <u>25</u> Minutes.				
Operator's Maximum Pressure <u>3500</u>				
Job Number <u>588806</u>				

