

The Road to Excellence Starts with Safety

| | | | |
|--|-----------------------|----------------------------------|---------------------------|
| Sold To #: 361672 | Ship To #: 3557188 | Quote #: 0021944359 | Sales Order #: 0901754520 |
| Customer: EAST CHEYENNE GAS STORAGE - EBUS | | Customer Rep: | |
| Well Name: ECGS | Well #: 6-21 WPD004-2 | API/UWI #: 05-075-09426-00 | |
| Field: PEETZ WEST | City (SAP): PEETZ | County/Parish: LOGAN | State: COLORADO |
| Legal Description: NE SW-6-11N-52W-1440FSL-2297FWL | | | |
| Contractor: | | Rig/Platform Name/Num: Fort #5 | |
| Job BOM: 7522 | | | |
| Well Type: STORAGE | | | |
| Sales Person: HALAMERICA\HX38199 | | Srvc Supervisor: Joseph Fantasia | |
| Job | | | |

| | | | |
|------------------------|--------|--|-------------------|
| Formation Name | | | |
| Formation Depth (MD) | Top | | Bottom |
| Form Type | | | BHST |
| Job depth MD | 5402ft | | Job Depth TVD |
| Water Depth | | | Wk Ht Above Floor |
| Perforation Depth (MD) | From | | To |

| Well Data | | | | | | | | | | |
|-------------------|------------|---------|-------|---------------|--------|-------|-----------|--------------|------------|---------------|
| Description | New / Used | Size in | ID in | Weight lbm/ft | Thread | Grade | Top MD ft | Bottom MD ft | Top TVD ft | Bottom TVD ft |
| Casing | | 9.625 | 8.921 | 36 | | | 0 | 1220 | 0 | 1220 |
| Casing | | 7 | 6.276 | 26 | | | 0 | 5402 | 0 | 5256 |
| Open Hole Section | | | 8.75 | | | | 1220 | 5402 | 1220 | 5256 |

| Tools and Accessories | | | | | | | | | |
|-----------------------|---------|-----|------|----------|--|----------------|---------|-----|------|
| Type | Size in | Qty | Make | Depth ft | | Type | Size in | Qty | Make |
| Guide Shoe | 7 | 1 | | 5402 | | Top Plug | 7 | 1 | HES |
| Float Shoe | 7 | 1 | | | | Bottom Plug | 7 | 1 | HES |
| Float Collar | 7 | 1 | | | | SSR plug set | 7 | 1 | HES |
| Insert Float | 7 | 1 | | | | Plug Container | 7 | 1 | HES |
| Stage Tool | 7 | 1 | | | | Centralizers | 7 | 1 | HES |

| Miscellaneous Materials | | | | | | | | | | |
|-------------------------|--|------|--|------------|--|------|--|-----------|--|------|
| Gelling Agt | | Conc | | Surfactant | | Conc | | Acid Type | | Qty |
| Treatment Fld | | Conc | | Inhibitor | | Conc | | Sand Type | | Size |

| Fluid Data | | | | | | | | | | |
|-----------------|---------------|---------------------------------------|-----|---------|------------------------|----------------|---------------|--------------|---------------------|--|
| Stage/Plug #: 1 | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 1 | Mud Flush III | Mud Flush III | 20 | bbl | 8.4 | | | | | |
| 4 lbm/bbl | | MUD FLUSH III, 40 LB SACK (101633304) | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |

| 2 | ElastiCem B2 | ELASTICEM (TM) SYSTEM | 100 | sack | 14.4 | 1.39 | 5.48 | 5 | 5.48 |
|---------------------------------------|--------------|------------------------------|-------|---------|---------------------------|-------------------|---------------------|---------------------|---------------------------|
| 5.48 Gal | | FRESH WATER | | | | | | | |
| 0.40 % | | HR-5, 50 LB SK (100005050) | | | | | | | |
| | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/mi n | Total Mix Fluid Gal |
| 3 | Displacement | Displacement | 0 | bbl | 8.34 | | | | |
| 0.10 lbm/bbl | | BE-3S, 50 LB BOX (101382962) | | | | | | | |
| | | | | | | | | | |
| Cement Left In Pipe | | Amount | 43 ft | | Reason | | Shoe Joint | | |
| Comment APPROX HIEGHT OF CEMENT 4541' | | | | | | | | | |

Summary Report



Crew: _____

Job Start Date: 10/19/2014

Sales Order #: 0901754520

WO #: 0901754520

PO/AFE #: NA

Customer: EAST CHEYENNE GAS STORAGE Field: PEETZ WEST
- EBUS
UWI / API Number: 05-075-09426-00 County/Parish: LOGAN
Well Name: ECGS State: COLORADO
Well No: 6-21 WPD004-2 Latitude: 40.953120
Longitude: -103.220640
Sect / Twn / Rng: 6/11/52

Job Type: CMT INTERMEDIATE
CASING BOM
Service Supervisor: Joseph Fantasia

Cust Rep Name:
Cust Rep Phone #:

Remarks:

| | | |
|---|--------------------------------------|------|
| The Information Stated Herein Is Correct | Customer Representative Signature | Date |
| | Customer Representative Printed Name | |

4.5 Job Event Log

| Type | Seq. No. | Activity | Graph Label | Date | Time | Source | Combined Pump Rate (bbl/min) | Downhole Density (ppg) | Pass-Side Pump Pressure (psi) | Comments |
|-------|----------|--|--|------------|----------|--------|---------------------------------|---------------------------|----------------------------------|---|
| Event | 1 | Arrive at Location from Service Center | Arrive at Location from Service Center | 10/18/2014 | 23:30:00 | USER | | | | ARRIVE AT LOCATION. PERFORM SITE ASSESSMENT WITH CREW. RIG TRIPPING OUT DRILL PIPE. |
| Event | 2 | Rig-up Lines | Rig-up Lines | 10/19/2014 | 09:00:00 | USER | | | | PRE RIG UP SAFETY MEETING PRIOR TO RIGGING UP LINES. |
| Event | 3 | Start Job | Start Job | 10/19/2014 | 10:04:00 | COM4 | 0.00 | 10.39 | 14.00 | PERFORM PRE JOB SAFETY MEETING WITH ALL PRESENT PERSONELL. |
| Event | 4 | Test Lines | Test Lines | 10/19/2014 | 10:30:19 | COM4 | 0.00 | 8.40 | 3330.00 | PRESSURE TEST LINES TO 3500 PSI. |
| Event | 5 | Pump Spacer 1 | Pump Spacer 1 | 10/19/2014 | 10:32:45 | COM4 | 0.00 | 8.27 | 5.00 | PUMP 20 BBLS FRESH WATER. |
| Event | 6 | Pump Spacer 2 | Pump Spacer 2 | 10/19/2014 | 10:38:30 | COM4 | 1.30 | 8.27 | 294.00 | PUMP 20 BBLS MUDFLUSH. |
| Event | 7 | Pump Cement | Pump Cement | 10/19/2014 | 10:53:56 | COM4 | 1.70 | 14.42 | 312.00 | PUMP 25 BBLS (100 SKS) ELASTICEM MIXED AT 14.4 PPG USING SUPPLIED WATER. DENSITY VERIFIED BY SCALE. |
| Event | 8 | Shutdown | Shutdown | 10/19/2014 | 11:03:00 | COM4 | 0.00 | 14.50 | 70.00 | |
| Event | 9 | Clean Lines | Clean Lines | 10/19/2014 | 11:03:46 | COM4 | 0.00 | 9.14 | -9.00 | CLEAN LINES TO PIT. |
| Event | 10 | Drop Top Plug | Drop Top Plug | 10/19/2014 | 11:08:32 | USER | 0.00 | 5.44 | 4.00 | PLUG PRE LOADED |
| Event | 11 | Pump Displacement | Pump Displacement | 10/19/2014 | 11:09:42 | COM4 | 1.10 | 8.65 | -8.00 | DISPLACE WITH 205 BBLS FRESH WATER. GOOD RETURNS THROUGHOUT. |
| Event | 12 | Bump Plug | Bump Plug | 10/19/2014 | 11:42:57 | COM4 | 3.00 | 8.36 | 737.00 | PLUG LANDED AT 737 PSI. PRESSURE BROUGHT TO 1500 PSI AND HELD 5 MIN. |
| Event | 13 | Check Floats | Check Floats | 10/19/2014 | 11:49:22 | USER | 0.00 | 8.34 | 1634.00 | FLOATS HELD. 1 BBL BACK |

| Type | Seq. No. | Activity | Graph Label | Date | Time | Source | Combined Pump Rate (bbl/min) | Downhole Density (ppg) | Pass-Side Pump Pressure (psi) | Comments |
|-------|-------------|----------|-------------|------------|----------|--------|------------------------------------|------------------------------|--|--|
| Event | 14 | End Job | End Job | 10/19/2014 | 12:30:00 | USER | | | | PRE RIG DOWN SAFETY MEETING PRIOR TO RIGGING DOWN LINES. |

5.0 Attachments

5.1 ECGS 6-21 WPD004-2 INTERMEDIATE-Custom Results.png



Company : ECGS
 Lease : ECGS 6-21
 Description: 7" J55, 26ppf longstring csg.

Date : 10/18/14
 Total : 5,401.73

Page # : 1
 Kelly Bushing : 12
 Jts on Location: 128
 Average Joint: 42.20'

| Description Of Tools | | JT. NO. | Length | Total | AD D | JT. NO. | Length | Total | AD D | JT. NO. | Length | Total | ADD Y/N |
|----------------------|------|---------|--------|----------|---------|---------|--------|----------|---------|---------|--------|----------|---------|
| KB CORRECTIO | 0.00 | 1 | 1.69 | 1.69 | Y | 11 | 42.26 | 383.05 | Y | 21 | 42.22 | 805.40 | Y |
| 0 | 0.00 | 2 | 42.20 | 43.89 | Y | 12 | 42.25 | 425.30 | Y | 22 | 41.95 | 847.35 | Y |
| 0 | 0.00 | 3 | 1.40 | 45.29 | Y | 13 | 42.25 | 467.55 | Y | 23 | 42.25 | 889.60 | Y |
| 0 | 0.00 | 4 | 42.20 | 87.49 | Y | 14 | 42.25 | 509.80 | Y | 24 | 42.23 | 931.83 | Y |
| 0 | 0.00 | 5 | 42.18 | 129.67 | Y | 15 | 42.24 | 552.04 | Y | 25 | 41.95 | 973.78 | Y |
| 0 | 0.00 | 6 | 42.20 | 171.87 | Y | 16 | 42.20 | 594.24 | Y | 26 | 42.25 | 1,016.03 | Y |
| 0 | 0.00 | 7 | 42.19 | 214.06 | Y | 17 | 42.23 | 636.47 | Y | 27 | 42.25 | 1,058.28 | Y |
| 0 | 0.00 | 8 | 42.25 | 256.31 | Y | 18 | 42.23 | 678.70 | Y | 28 | 42.20 | 1,100.48 | Y |
| 0 | 0.00 | 9 | 42.25 | 298.56 | Y | 19 | 42.25 | 720.95 | Y | 29 | 42.20 | 1,142.68 | Y |
| 0 | 0.00 | 10 | 42.23 | 340.79 | Y | 20 | 42.23 | 763.18 | Y | 30 | 41.69 | 1,184.37 | Y |
| 0 | 0.00 | Total | 340.79 | | | Total | 422.39 | | | Total | 421.19 | | |
| 0 | 0.00 | | | | | | | | | | | | |
| | 0.00 | | | | | | | | | | | | |
| | 0.00 | | | | | | | | | | | | |
| | 0.00 | | | | | | | | | | | | |
| 0 | 0.00 | | | | | | | | | | | | |
| 0 | 0.00 | | | | | | | | | | | | |
| 0 | 0.00 | | | | | | | | | | | | |
| 0 | 0.00 | | | | | | | | | | | | |
| 0 | 0.00 | | | | | | | | | | | | |
| 0 | 0.00 | | | | | | | | | | | | |
| Total BHA : | 0.00 | | | | | | | | | | | | |
| | | JT. NO. | Length | Total | ADD Y/N | JT. NO. | Length | Total | ADD Y/N | JT. NO. | Length | Total | ADD Y/N |
| | | 31 | 42.25 | 1,226.62 | Y | 41 | 42.25 | 1,648.18 | Y | 51 | 42.18 | 2,070.39 | Y |
| | | 32 | 42.22 | 1,268.84 | Y | 42 | 42.25 | 1,690.43 | Y | 52 | 42.20 | 2,112.59 | Y |
| | | 33 | 42.12 | 1,310.96 | Y | 43 | 42.25 | 1,732.68 | Y | 53 | 42.25 | 2,154.84 | Y |
| | | 34 | 42.12 | 1,353.08 | Y | 44 | 42.21 | 1,774.89 | Y | 54 | 42.23 | 2,197.07 | Y |
| | | 35 | 42.15 | 1,395.23 | Y | 45 | 42.19 | 1,817.08 | Y | 55 | 42.25 | 2,239.32 | Y |
| | | 36 | 42.12 | 1,437.35 | Y | 46 | 42.20 | 1,859.28 | Y | 56 | 42.25 | 2,281.57 | Y |
| | | 37 | 42.13 | 1,479.48 | Y | 47 | 42.22 | 1,901.50 | Y | 57 | 42.19 | 2,323.76 | Y |
| | | 38 | 42.25 | 1,521.73 | Y | 48 | 42.24 | 1,943.74 | Y | 58 | 42.19 | 2,365.95 | Y |
| | | 39 | 42.24 | 1,563.97 | Y | 49 | 42.22 | 1,985.96 | Y | 59 | 42.25 | 2,408.20 | Y |
| | | 40 | 41.96 | 1,605.93 | Y | 50 | 42.25 | 2,028.21 | Y | 60 | 42.25 | 2,450.45 | Y |
| | | Total | 421.56 | | | Total | 422.28 | | | Total | 422.24 | | |
| | | | | | | | | | | | | | |
| | | JT. NO. | Length | Total | AD D | JT. NO. | Length | Total | AD D | JT. NO. | Length | Total | ADD Y/N |
| | | 61 | 42.24 | 2,492.69 | Y | 71 | 42.25 | 2,915.04 | Y | 81 | 42.25 | 3,337.36 | Y |
| | | 62 | 42.25 | 2,534.94 | Y | 72 | 42.24 | 2,957.28 | Y | 82 | 42.24 | 3,379.60 | Y |
| | | 63 | 42.24 | 2,577.18 | Y | 73 | 42.18 | 2,999.46 | Y | 83 | 42.25 | 3,421.85 | Y |
| | | 64 | 42.25 | 2,619.43 | Y | 74 | 42.23 | 3,041.69 | Y | 84 | 42.20 | 3,464.05 | Y |
| | | 65 | 42.24 | 2,661.67 | Y | 75 | 42.22 | 3,083.91 | Y | 85 | 42.15 | 3,506.20 | Y |
| | | 66 | 42.20 | 2,703.87 | Y | 76 | 42.23 | 3,126.14 | Y | 86 | 42.24 | 3,548.44 | Y |
| | | 67 | 42.19 | 2,746.06 | Y | 77 | 42.25 | 3,168.39 | Y | 87 | 42.25 | 3,590.69 | Y |
| | | 68 | 42.23 | 2,788.29 | Y | 78 | 42.25 | 3,210.64 | Y | 88 | 42.15 | 3,632.84 | Y |
| | | 69 | 42.25 | 2,830.54 | Y | 79 | 42.23 | 3,252.87 | Y | 89 | 42.09 | 3,674.93 | Y |
| | | 70 | 42.25 | 2,872.79 | Y | 80 | 42.24 | 3,295.11 | Y | 90 | 42.09 | 3,717.02 | Y |
| | | Total | 422.34 | | | Total | 422.32 | | | Total | 421.91 | | |
| | | | | | | | | | | | | | |
| | | JT. NO. | Length | Total | AD D | JT. NO. | Length | Total | AD D | JT. NO. | Length | Total | ADD Y/N |
| | | 101 | 42.15 | 4,180.45 | Y | 111 | 42.14 | 4,601.89 | Y | 121 | 42.14 | 5,022.65 | Y |
| | | 102 | 42.15 | 4,222.60 | Y | 112 | 41.70 | 4,643.59 | Y | 122 | 42.10 | 5,064.75 | Y |
| | | 103 | 42.19 | 4,264.79 | Y | 113 | 42.14 | 4,685.73 | Y | 123 | 42.11 | 5,106.86 | Y |
| | | 104 | 42.14 | 4,306.93 | Y | 114 | 42.12 | 4,727.85 | Y | 124 | 42.14 | 5,149.00 | Y |
| | | 105 | 42.13 | 4,349.06 | Y | 115 | 42.10 | 4,769.95 | Y | 125 | 42.14 | 5,191.14 | Y |
| | | 106 | 42.12 | 4,391.18 | Y | 116 | 42.10 | 4,812.05 | Y | 126 | 42.15 | 5,233.29 | Y |
| | | 107 | 42.15 | 4,433.33 | Y | 117 | 42.14 | 4,854.19 | Y | 127 | 42.10 | 5,275.39 | Y |
| | | 108 | 42.14 | 4,475.47 | Y | 118 | 42.10 | 4,896.29 | Y | 128 | 42.11 | 5,317.50 | Y |
| | | 109 | 42.13 | 4,517.60 | Y | 119 | 42.09 | 4,938.38 | Y | 129 | 42.13 | 5,359.63 | Y |
| | | 110 | 42.15 | 4,559.75 | Y | 120 | 42.13 | 4,980.51 | Y | 130 | 42.10 | 5,401.73 | Y |
| | | Total | 421.45 | | | Total | 420.76 | | | Total | 421.22 | | |
| | | | | | | | | | | | | | |
| | | JT. NO. | Length | Total | AD D | JT. NO. | Length | Total | AD D | JT. NO. | Length | Total | ADD Y/N |
| | | 131 | 0.00 | - | Y | 141 | 0.00 | - | Y | 151 | 0.00 | - | Y |
| | | 132 | 0.00 | - | Y | 142 | 0.00 | - | Y | 152 | 0.00 | - | Y |
| | | 133 | 0.00 | - | Y | 143 | 0.00 | - | Y | 153 | 0.00 | - | Y |
| | | 134 | 0.00 | - | Y | 144 | 0.00 | - | Y | 154 | 0.00 | - | Y |
| | | 135 | 0.00 | - | Y | 145 | 0.00 | - | Y | 155 | 0.00 | - | Y |
| | | 136 | 0.00 | - | Y | 146 | 0.00 | - | Y | 156 | 0.00 | - | Y |
| | | 137 | 0.00 | - | Y | 147 | 0.00 | - | Y | 157 | 0.00 | - | Y |
| | | 138 | 0.00 | - | Y | 148 | 0.00 | - | Y | 158 | 0.00 | - | Y |
| | | 139 | 0.00 | - | Y | 149 | 0.00 | - | Y | 159 | 0.00 | - | Y |
| | | 140 | 0.00 | - | Y | 150 | 0.00 | - | Y | 160 | 0.00 | - | Y |
| | | Total | 0.00 | | | Total | 0.00 | | | Total | 0.00 | | |