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|---|--|-------------------|--|---|--|--|--|-----------------------------|--|------------------------------|--|--------------------------|--|
| Hydro Resources 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171 | | | |  Hydro resources | | DRILLING MUD REPORT | | | | 2 | | | |
| Version 1.25.1 | | | | Date 07/22/14 | | Measured Depth 1,963 ft. | | | | T.V. Depth | | | |
| OPERATOR: Augustus Energy | | | | CONTRACTOR: Excell | | Spud Date 07/21/14 | | | | Present Activity Drilling | | Rig No. 2 | |
| Operator's Representative: | | | | Contractor's Representative: | | Mark | | | | | | | |
| Well Name & No. Field: Vernon 86500 | | | | County, Parish: | | Yuma | | | | State: | | CO | |
| 03 Hays 34-07-2s44w Legal: SWNE, Sec3, Twp2s, Rng44w | | | | VOLUMES | | PUMP INFORMATION | | | | HYDRAULICS | | | |
| BIT DATA | | | | CASING & DRILLING ASSEMBLY | | Pit Vol. | | PUMP #1 | | PUMP #2 | | ANNULAR VELOCITY | |
| Bit Size 6.25 | | Size 7.25 | | set @ 484 Ft | | Pipe Capacity | | 200FXN | | | | Drill Pipe 262 ft/min | |
| Bit Type MI516 | | Size | | set @ Ft | | 14 bbls | | 5.25 x14 | | | | Drill Collar 1244 ft/min | |
| Bit No. | | Size | | set @ Ft | | Ann Volume | | 63 SPM | | | | CIRCULATING PRESSURE | |
| Jets (32nd) | | Size | | set @ Ft | | 49 bbls | | 4.56 G/ST | | | | 1405 psi | |
| 13 | | 13 | | Drill Collar 5.78 2.5 337 | | Hole Volume | | 287 GPM | | | | BOT. UP 7 min | |
| 13 | | 12 | | Drill Collar | | 63 bbls | | 6.83 BPM | | | | SURF. TO BIT 2.0 min | |
| 12 | | | | Drill Pipe 3.5 2.74 1626 | | Total Cir Vol | | Total GPM | | Total BPM | | TOT. CIR TIME 31 min | |
| | | H.W. Drill Pipe | | | | 213 bbls | | 287 | | 6.83 | | | |
| Sample Fro <input type="checkbox"/> Flowline <input type="checkbox"/> Pit | | | | Mud Properties | | Calculate Alkalinity <input type="checkbox"/> Check | | HYDRAULICS | | | | | |
| Flowline Temperature (°F) | | | | 114 | | | | Jet Velocity | | 151 Ft/Sec | | Nozzle Area | |
| Time Sample Taken | | | | 10:25pm | | | | Horsepower | | 1 HP/SQ. In | | 0.61 Sq In | |
| Depth (ft) | | | | 1963 | | | | Impact Force | | 6.3 lbf/Sq. In | | ECD | |
| Mud Weight (ppg) | | | | 8.6 | | | | Press Loss at Bit | | 175psi | | 9.3 ppg | |
| Mud Gradient (psi/ft) | | | | 0.4472 | | | | Press Loss at Bit | | 12% | | | |
| Funnel Viscosity @ °F | | | | 31 | | | | Recommended Equipment | | | | | |
| Plastic Visc. cp @ 75 °F | | | | 2 | | Cntrfruge <input checked="" type="checkbox"/> Shaker <input checked="" type="checkbox"/> Desander <input type="checkbox"/> | | | | | | | |
| Yield Point (lb/100ft2) | | | | 1 | | Degasser <input type="checkbox"/> Desilter <input type="checkbox"/> Other <input type="checkbox"/> | | | | | | | |
| Gel Strength (lb/100ft2) 10-sec | | | | 0 | | | | Recommended Mud Properties | | | | | |
| Gel Strength (lb/100ft2) 10-min | | | | 0 | | By Authority of: <input type="checkbox"/> Company Representative <input checked="" type="checkbox"/> Drilling Contractor | | | | | | | |
| Gel Strength (lb/100ft2) 30-min | | | | x | | Mud Wt: 8.5-9.2 Filtrate: 6-8cc Viscosity: 28-32 | | | | | | | |
| Filtrate API (cm3/30 min) | | | | 8.6 | | LCM: | | Excess Lime: | | lb/bbl | | | |
| Filtrate API HTHP (cm3/30 min) | | | | x | | | | RECOMMENDED TOLRY TREATMENT | | | | | |
| Cake Thickness (/32nds) | | | | 1 | | Mud looks good for TD. | | | | | | | |
| Solids Content (% by vol) | | | | 2.0 | | | | | | | | | |
| Water Content (% by Vol.) | | | | 98 | | | | | | | | | |
| Sand Content (% by vol) | | | | .1 | | | | | | | | | |
| Bentonite Content (lb/bbl) | | | | x | | | | | | | | | |
| pH <input checked="" type="checkbox"/> Strip <input type="checkbox"/> Meter | | | | 9 | | | | | | | | | |
| Alkalinity Mud (Pm) cm3 N/50 Acid | | | | x | | | | | | | | | |
| Alkalinity, Pf / Mf | | | | .07/2.5 | | | | | | | | | |
| Chloride (mg/l) | | | | 14300 | | | | | | | | | |
| Total Hardness as Calcium (mg/l) | | | | 1516 | | | | | | | | | |
| Oil Content (% by vol) | | | | 0 | | | | | | | | | |
| LCM (lb/bbl) | | | | x | | | | | | | | | |
| Excess Lime (lb/bbl) | | | | x | | If you have any questions please give me a call @ (970)302-3793, Thank you. | | | | | | | |
| | | | | | | | | DAILY REMARKS | | | | | |
| Solids Analysis | | | | | | | | | | | | | |
| L.G. Solids | | % H.G. Solids | | % L.G. Solids | | % H.G. Solids | | % L.G. Solids | | % H.G. Solids | | % L.G. Solids | |
| L.G. Solids | | ppb | | ppb | | ppb | | ppb | | ppb | | ppb | |
| Corrected Solids | | % Average Sp. Gr. | | | | | | | | | | | |
| CHEMICALS | | | | | | | | | | | | | |
| Starting Inventory | | | | | | | | | | | | | |
| Chemicals Received | | | | | | | | | | | | | |
| Closing Inventory | | | | | | | | | | | | | |
| Chemicals Used | | | | | | | | | | | | | |
| Daily Cost | | | | | | | | | | | | | |
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| Starting Inventory | | | | | | | | | | | | | |
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| Closing Inventory | | | | | | | | | | | | | |
| Chemicals Used | | | | | | | | | | | | | |
| Daily Cost | | | | | | | | | | | | | |
| TECHNICAL REP: Jeremy Cigich | | | | WAREHOUSE: 13027 CR 18 | | NAME: | | | | | | | |
| CELL PHONE NO: (970)302-3793 | | | | ADDRESS: Ft. Lupton, CO 80621 | | PHONE: | | | | | | | |
| ANS. SERVICE: | | | | PHONE: (303) 857-4171 | | PHONE: | | | | | | | |
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