STATE OF NEVADA
DIVISION OF WATER RESOURCES
# WELL DRILLER'S REPORT

**OFFICE USE ONLY**
Log No. 115550
Permit No.
Basin 101

**PRINT OR TYPE ONLY**
**DO NOT WRITE ON BACK**

***Please complete this form it its entirety in accordance with NRS 534.170 and NAC 534.340***

NOTICE OF INTENT NO. 62476

1. OWNER U.S. Navy MW-22
MAILING ADDRESS 4755 Pasture Road Fallon, Nv. 89496
ADDRESS AT WELL LOCATION NAS Fallon, Nv.
4755 Pasture Road Fallon, Nv. 89496

2. LOCATION NW ¼ SE ¼ Sec 23 T 18N N/S R 29 E
PERMIT/WAIVER No. 006-611-01
Issued by Water Resources Parcel No.
Latitude 39.2427.20
Longitude 118.4149.15
Subdivision Name: n/a
UTM E 2592515.43 ☐ NAD 27
N 14818894.03 ☑ NAD 83/WGS 84
County: Churchill

3. WORKED PERFORMED
☑ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Other...

4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☐ Municipal/Industrial ☑ Monitor ☐ Stock

5. WELL TYPE
☐ Cable ☐ Rotary ☐ RVC
☐ Air ☑ Other... auger

6. LITHOLOGIC LOG

| Material | Water Strata | From | To | Thickness |
|---|---|---|---|---|
| Sand, brown | no | 0 | 7 | 7 |
| Clay, brown | no | 7 | 9 | 2 |
| Clayey sandy silt,brown | no | 9 | 11 | 2 |
| Sand fine, brown | yes | 11 | 12 | 1 |
| Silty clay, brown | no | 12 | 13 | 1 |
| Silty sand, brown | yes | 13 | 18 | 5 |
| Clay, brown | no | 18 | 20 | 2 |

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Date started 1-Feb , 20 12
Date completed 1-Feb , 20 12

7. WELL TEST DATA
TEST METHOD: ☐ Bailer ☐ Pump ☐ Air Lift

| G.P.M. | Draw Down (Feet Below Static) | Time (Hours) |
|---|---|---|
| | 39.407637°N | NAD 27 |
| | 118-696013°W | |

8. WELL CONSTRUCTION
Depth Drilled 20 Feet Depth Cased 19 Feet

HOLE DIAMETER (BIT SIZE)

| | From | To |
|---|---|---|
| 8 Inches | 0 Feet | 20 Feet |
| Inches | Feet | Feet |
| Inches | Feet | Feet |

CASING SCHEDULE

| Size O.D. (Inches) | Weight/Ft. (Pounds) | Wall Thickness (Inches) | From (Feet) | To (Feet) |
|---|---|---|---|---|
| 2.375 | | .152 | 0 | 9 |

Perforations:
Type of perforation mill slot
Size of perforation 0.1
From 9 feet to 19 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☑ Yes ☐ No
Depth of Seal 8
Placement Method: ☐ Pumped ☑ Poured
Gravel Packed: ☑ Yes ☐ No
From 8 feet to 20 feet
Seal Type: ☑ Neat Cement ☐ Cement Grout ☐ Concrete Grout

9. WATER LEVEL
Static water level 9 feet below land surface
Artesian flow no G.P.M n/a P.S.I
Water temperature n/a °F Quality n/a

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name WDC Exploration & Wells
Contractor
Address PO Box 141 Zamora Ca.
Contractor
Nevada contractor's license number issued by the *State Contractor's Board* 0012852
Nevada driller's license number issued by the Division of Water Resources, the *on-site driller* 2111-T1
Signed [signature]
By driller performing actual drilling on site or contractor
Date 3/6/2012

(Rev. 06/10)

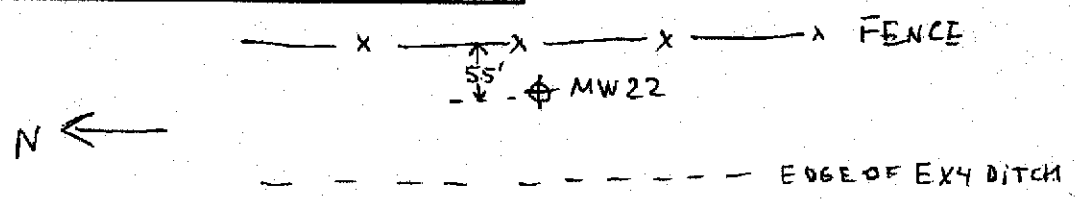
**USE ADDITIONAL SHEETS IF NECESSARY**

TETRA TECH EM INC.

# SOIL BORING AND WELL INSTALLATION AND VISUAL CLASSIFICATION LOG

DO:
Bldg./Site: 16
Project Name: NAS FALLON TCRA

| | |
|---|---|
| Boring Number: TT16 - MW22 | Date Started: 2/1/12 |
| Drilling Method: (Circle one) HSA Continuous Core/Direct Push/Hand Auger | Date Completed: |
| Air Rotary/Mud Rotary/Dual Tube Percussion/Sonic/Vacuum | Logged By: V. PRILEPIN |
| Outer Diameter of Boring: 8" | Drilling Subcontractor: WDC Expl. & Wells |
| Inner Diameter of Well Casing: 2" | Driller: GARY WHITNEY |
| Depth to Water (ft./bgs.) | Location Sketch: |




| Time | Depth (ft) bgs | Drive Interval | Recovered Interval | Sample ID | Blow count (per 6 inches) / V.S. utility type, dia. | Description | USCS soil symbol | Well construction | OVM (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| 14:55 | 2 | X | 30 | | | 0-5' Hand Augered: 0-7.5' sand, brown, 7.5YR 4/4, poorly graded, fine to medium grained, loose, dry with tiny mica, 100% sand | SP | | |
| | 4 | | | | | | | | |
| | 6 | X | 40 | | | | | | |
| | 8 | | | | | 7.5-8 stiff to hard clay, brown 7.5YR 4/2. with mica up to 1 mm., 100% clay, grading to clayey silt at 8.5. | CL | | |
| | 10 | X | | | | 8.5 - 11(?) clayey, sandy silt, brown, 60% silt, 25 clay, 15 sand, wet at ~11 (?) | ML | | |

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TETRA TECH EM INC.

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DO:
Bldg./Site: 16
Project Name: NAS FALLON TCRA

TT16 - MW22

| Time | Depth (ft) bgs | Drive Interval | Recovered Interval | Sample ID | Blow count (per 6 inches) / V.O. utility bgs, dia. | Description | USCS soil symbol | Well construction | OVM (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| | | | 50 | | | 11 - 12 very fine to fine sand, brown, 7.5YR 4/4 loose, saturated, grading to silty clay. | ML | | |
| | 12 | | | | | 12 - 13 silty clay, brown, 7.5YR 4/3, soft, high plasticity, micaceous, wet | SM / CL | | |
| | 14 | | | | | 13 - 13.5 silty sand, brown, saturated micaceous, very fine to fine; 80% f. sand, 20% silt | SM / CL | | |
| | 16 | | 100 | | | 13.5 - 14.5 silty, sandy clay, brown, moist, low to moderate plasticity, grading to sandy silt; 50% clay, 25 silt, 25 sand | ML | | |
| | 18 | | | | | 14.5 - 17 sandy silt w/some clay, brown moist, soft. 70% silt, 15 very fine sand 15 clay | SM | | |
| | | | 100 | | | 17 - 18.5 fine to very fine sand, brown, mica to 0.5mm, saturated 85% sand <15% silt | CL | | |
| | 20 | | | | | 18.5 - 20 hard clay, brown, 7.5YR 5/3 crumbles, some plasticity 100% clay. | | | |
| | | | | | | T.D. 20' bgs. Install well at 19' bgs (after adding 1' of sand to the bottom | | | |

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# MONITORING WELL COMPLETION RECORD

TETRATECH EM INC

## MONITORING WELL

MONITORING WELL NO.: TT16-MW22
PROJECT: NAS FALLON TCRA
SITE: 16
BOREHOLE NO.:
WELL PERMIT NO.:
TOC TO BOTTOM OF WELL:

## DRILLING INFORMATION

DRILLING BEGAN:
DATE: 2/1/12 TIME: 14:55
WELL INSTALLATION BEGAN:
DATE: 2/1/12 TIME: 15:35
WELL INSTALLATION FINISHED:
DATE: 2/1/12 TIME: 16:15
DRILLING CO.: WDC
DRILLER: Gary Whitney
LICENSE:
DRILL RIG: HSA CME-85
DRILLING METHOD:
- ☒ HOLLOW STEM AUGER
- ☐ AIR ROTARY
- ☐ OTHER:

DIAMETER OF AUGERS:
ID: OD: 8"

## WELL CASING

- ☒ SCHEDULE 40 PVC
- ☐ OTHER:

PRODUCT:
MFG. BY:
CASING DIAMETER:
ID: OD: 2"
LENGTH OF CASING:

## WELL SCREEN

- ☒ SCHEDULE 40 PVC
- ☐ OTHER:

PRODUCT:
MFG. BY:
CASING DIAMETER:
ID: OD: 2"
SLOT SIZE: 0.02
LENGTH OF SCREEN: 10

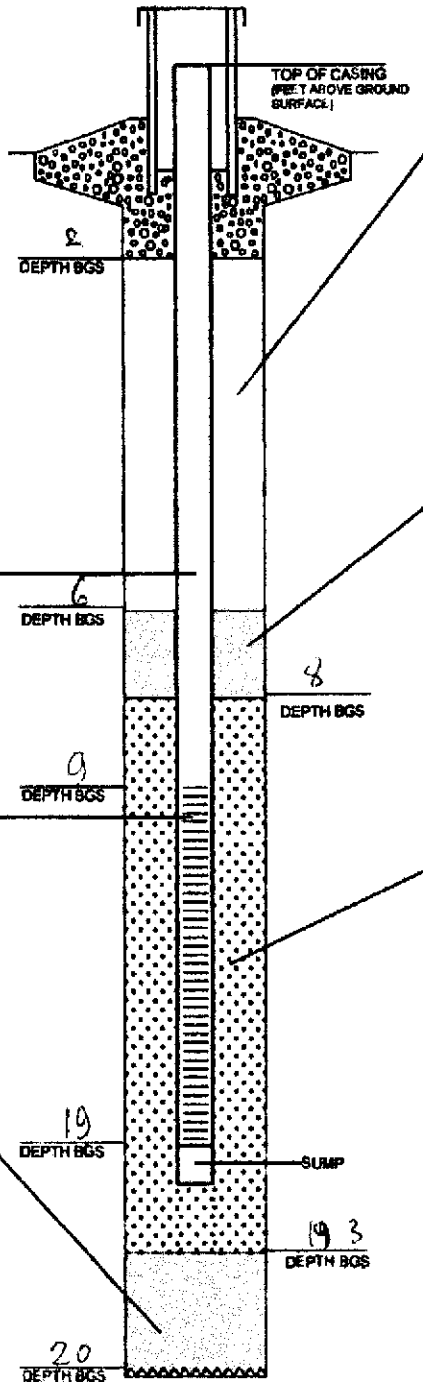
## BOREHOLE BACKFILL

AMOUNT CALCULATED:
AMOUNT USED:
- ☐ BENTONITE CHIPS, SIZE:
- ☐ BENTONITE PELLETS, SIZE:
- ☐ SLURRY:
- ☒ FORMATION COLLAPSE:
- ☒ OTHER:

PRODUCT: SAND, CEMEX
MFG. BY:
METHOD INSTALLED:
- ☐ POURED ☐ TREMIE
- ☐ OTHER:

## SURFACE COMPLETION

- ☒ FLUSH MOUNT
- ☐ ABOVE GROUND WITH BUMPER POST
- ☐ CONCRETE ☐ ASPHALT




## SURVEY INFORMATION

TOC ELEVATION:
GROUND SURFACE ELEVATION:
NORTHING:
EASTING:
DATE SURVEYED:
SURVEY CO.:

## ANNULAR SEAL

VOLUME CALCULATED:
AMOUNT USED: ~10 gal
- ☒ GROUT FORMULA (PERCENTAGES)
  - PORTLAND CEMENT: 95%
  - BENTONITE: 5%
  - WATER:
- ☐ PREPARED MIX
  - PRODUCT:
  - MFG. BY:

METHOD INSTALLED:
- ☒ POURED ☐ TREMIE
- ☐ OTHER:

## BENTONITE SEAL

VOLUME CALCULATED:
AMOUNT USED: 1 bag 50 lbs
- ☐ PELLETS, SIZE
- ☒ CHIPS, SIZE: MEDIUM
- ☐ OTHER:

PRODUCT: PUREGOLD
MFG. BY: CETCO
METHOD INSTALLED:
- ☒ POURED ☐ TREMIE
- ☐ OTHER:

AMOUNT OF WATER USED

## FILTER PACK

- ☐ PREPACKED FILTER

VOLUME CALCULATED:
AMOUNT USED: 7 bags 50 lbs
- ☒ SAND, SIZE: 2/12

PRODUCT: CEMEX
MFG. BY:
METHOD INSTALLED:
- ☒ POURED ☐ TREMIE
- ☐ OTHER:

WATER LEVEL: 8.67 2/2/12 14:30
(BTOC AFTER WELL INSTALLATION)

## CENTRALIZERS USED?

- ☐ YES ☒ NO

CENTRALIZER DEPTHS:

**LEGEND**

BGS = BELOW GROUND SURFACE
BTOC = BELOW TOP OF CASING
N/A = NOT APPLICABLE
NR = NOT RECORDED
TOC = TOP OF CASING

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