

PLSS GPS Observation Sheet

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|-----------------|--------------------------|--|---|-----------------------------------|-----------|--|--|------------------------------|--------|--|----|-------------------------|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Project Name SL T15S R10E (Meridian Township Range) | | | | Township | | ½ (2) | N S | Range | | ½ (2) | E W | Section | | Meridian | | | | | | | | | | | | | | | | | | |
| | | | | T | 1 | 5 | S | 1 | 0 | | E | | | (SL) US | | | | | | | | | | | | | | | | | | |
| Contacts Name Lee M. Swasey | | | | Source Agency JOHANSEN & TUTTLE ENGINEERING | | | | | | Date 11/22/05 | | | | | | | | | | | | | | | | | | | | | | |
| Contacts Phone (435) 381-2523 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Control Station | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name ELM GPS 12 | | | | Type Other EMERY COUNTY | | | | | | Accuracy Order | | | | | | | | | | | | | | | | | | | | | | |
| USGS Quad Name OLSEN RESERVOIR UTAH | | | | Datum Nad83 (1994) | | | | | | State UTAH | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Nad27 | | Nad83 | | WGS84 | | Local | | County EMERY | | | | | | | | | | | | | | | | | | | | |
| Latitude | | | | | | | Longitude | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | 3 | 9 | - | 2 | 3 | - | 2 | 5 | . | 4 | 2 | 8 | 1 | 2 | 7 | W | 1 | 1 | 0 | - | 4 | 5 | - | 0 | 1 | . | 5 | 8 | 6 | 1 | 0 | |
| Northing | | | | | | | | | | Easting | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 9 | 4 | 7 | 5 | 8 | 7 | . | 6 | 3 | | | | | | | | 1 | 8 | 5 | 2 | 2 | 5 | 7 | . | 0 | 6 | | | | | | |
| Units Survey Foot <input type="checkbox"/> International Foot <input checked="" type="checkbox"/> Meter <input type="checkbox"/> | | | | Coordinate Type State Plane <input type="checkbox"/> UTM <input type="checkbox"/> | | | | Zone Utah North <input type="checkbox"/> Utah Central <input checked="" type="checkbox"/> Utah South <input type="checkbox"/> | | | | Vertical Datum NGVD29 <input type="checkbox"/> NAVD88 <input checked="" type="checkbox"/> | | | | | | | | | | | | | | | | | | | | |
| Ellipsoid Height 1711.15 M | | | | FT | | | | Geoid Height M | | | | 5671.75 FT | | | | | | | | | | | | | | | | | | | | |
| Base Receiver | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type TRIMBLE | | | | Model 4000 SSI | | | | Serial Number | | | | | | | | | | | | | | | | | | | | | | | | |
| Logging Interval 5 SEC. | | | Elevation Mask 13 | | | PDOP Mask 6 | | | Antenna Type L1/L2 w/GROUND PLANE | | | | | | | | | | | | | | | | | | | | | | | |
| Start Time | | | | AM | | PM | | End Time | | | | AM | | | PM | | | | | | | | | | | | | | | | | |
| Antenna Height | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Session Beginning | | 1 st | | M | | 2 nd | | M | | 3 rd | | M | | Ave 4.685 Feet M | | | | | | | | | | | | | | | | | | |
| Session End | | 1 st | | M | | 2 nd | | M | | 3 rd | | M | | Ave M | | | | | | | | | | | | | | | | | | |
| Rover Receiver | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type TRIMBLE | | | | Model 5800 | | | | Serial Number 4253117118 | | | | | | | | | | | | | | | | | | | | | | | | |
| Approximate Distance From Base Station | | | | Miles | | Antenna Type 5800 INTERNAL | | | | Antenna Height 6.6 FT | | | | | | | | | | | | | | | | | | | | | | |
| Station Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Observation Type <input checked="" type="checkbox"/> RTK <input type="checkbox"/> FAST STATIC <input type="checkbox"/> STATIC <input type="checkbox"/> OTHER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| First Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Station Name (M1) | | | | 5 0 0 1 0 0 | | | | | | | | | | | Description SW corner Sec. 35 | | | | | | | | | | | | | | | | | |
| Occupation time | | | | PDOP Best | | | | | | RMS Best | | | | | | | | | | | | | | | | | | | | | | |
| Number of Measurements 60 | | | | PDOP Worst 1.5 | | | | | | RMS Worst 10.3 | | | | | | | | | | | | | | | | | | | | | | |
| Second Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Station Name (M2) | | | | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Occupation time | | | | PDOP Best | | | | | | RMS Best | | | | | | | | | | | | | | | | | | | | | | |
| Number of Measurements | | | | PDOP Worst | | | | | | RMS Worst | | | | | | | | | | | | | | | | | | | | | | |
| Inverse Distance Between M1 and M2 | | | | FT | | Alternate Base Station Used | | | | Yes | | | No | | | | | | | | | | | | | | | | | | | |
| Monument and Markings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type / Size | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stone | | | | Pipe/Cap | | | | Post | | | | Other | | | | | | | | | | | | | | | | | | | | |
| Size | | | | Size 2½ / 3¼ 1969 BLM | | | | Size | | | | Size | | | | | | | | | | | | | | | | | | | | |
| Material | | | | Material steel / brass | | | | Material | | | | Material | | | | | | | | | | | | | | | | | | | | |

Sketch/Rubbing or Attach Photo of GPS Station Occupied
Show rotation of stampings/markings relative to North and describe briefly

See Emery County Land Survey Monument Record Sheet 1510500100

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-22-05

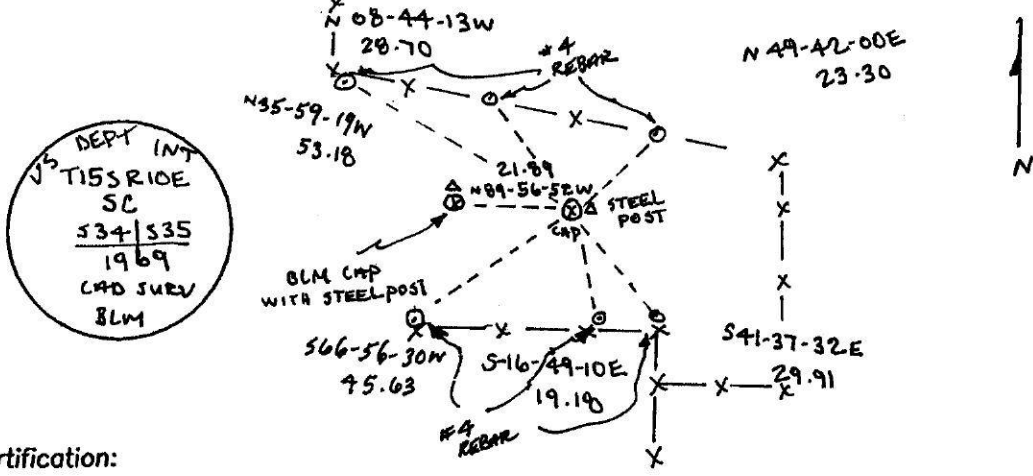
County Reference No. 1510500100

Type of Monument: Section Corner Quarter Corner
 Bench Mark Other _____

Your Description and Observation of Monument Found (Be Specific):
 1969 BLM BRASS CAP 12" ABOVE GROUND LEVEL WITH A STEEL FENCE POST
 DRIVEN ALONGSIDE

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the
 Location of this Point: SET A #4 REBAR AS SHOWN BELOW

Sketch showing Relative Location of Monument Accessories and Two Reference Points Stating Whether
 Found or Set. Show Supporting and/or Contradictory Evidence where Applicable. Include North Arrow.

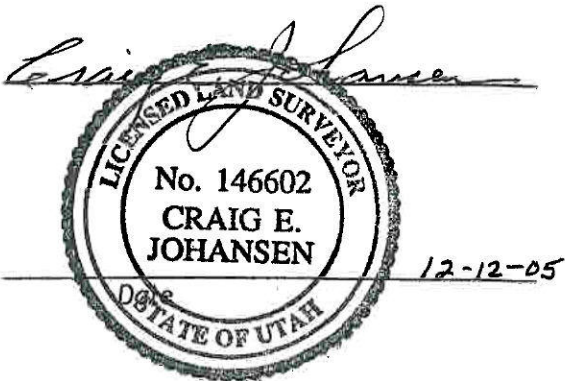
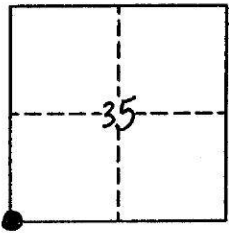


Certification:

Firm name and/or Surveyor: Johansen & Tuttle Eng.
 Address: 90 S. 100 E. Castle Dale, Utah 84513 Phone: (435) 381-2523

This is to certify that I was in responsible charge of the surveying work described in this record and that to the best of my knowledge the information presented herein is true and correct.

Location Diagram:
 Section: 35
 Township: 15S
 Range: 10E



PLSS GPS Observation Sheet

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|--------------------|-----------------|--|--|--|------------|---------|----------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Project Name SL T15S R10E <small>(Meridian Township Range)</small> | | Township | | ½ (2) | N S | Range | | ½ (2) | E W | Section | Meridian | | | | | | | | | | | | | | | | | | | | |
| | | T | 1 | 5 | | S | 1 | 0 | | E | | (SL) US | | | | | | | | | | | | | | | | | | | |
| Contacts Name Lee M. Swasey | | Source Agency JOHANSEN & TUTTLE ENGINEERING | | | | | | Date 11/22/05 | | | | | | | | | | | | | | | | | | | | | | | |
| Contacts Phone (435) 381-2523 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Control Station | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name ELM GPS 12 | | Type COR HARN TRI <input checked="" type="radio"/> Other EMERY COUNTY | | | | | | Accuracy Order | | | | | | | | | | | | | | | | | | | | | | | |
| USGS Quad Name OLSEN RESERVOIR UTAH | | Datum Nad27 Nad83 <input checked="" type="radio"/> Nad83 (1994) WGS84 Local | | | | | | State UTAH County EMERY | | | | | | | | | | | | | | | | | | | | | | | |
| Latitude | | | | | | Longitude | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | 3 | 9 | - | 2 | 3 | - | 2 | 5 | . | 4 | 2 | 8 | 1 | 2 | 7 | W | 1 | 1 | 0 | - | 4 | 5 | - | 0 | 1 | . | 5 | 8 | 6 | 1 | 0 |
| Northing | | | | | | Easting | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 9 | 4 | 7 | 5 | 8 | 7 | . | 6 | 3 | | | | | | | 1 | 8 | 5 | 2 | 2 | 5 | 7 | . | 0 | 6 | | | | | | |
| Units | | Survey Foot | <input checked="" type="radio"/> International Foot | Meter | Coordinate Type | | <input checked="" type="radio"/> State Plane | UTM | | | | | | | | | | | | | | | | | | | | | | | |
| Zone | | Utah North | <input checked="" type="radio"/> Utah Central | Utah South | Vertical Datum | | NGVD29 | <input checked="" type="radio"/> NAVD88 | | | | | | | | | | | | | | | | | | | | | | | |
| Ellipsoid Height | | 1711.15 M | | FT | Geoid Height | | M | | 5671.75 FT | | | | | | | | | | | | | | | | | | | | | | |
| Base Receiver | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type TRIMBLE | | Model 4000 SSI | | | | Serial Number | | | | | | | | | | | | | | | | | | | | | | | | | |
| Logging Interval 5 SEC. | | Elevation Mask 13 | | PDOP Mask 6 | | Antenna Type L1/L2 w/GROUND PLANE | | | | | | | | | | | | | | | | | | | | | | | | | |
| Start Time | | AM | PM | End Time | | AM | PM | | | | | | | | | | | | | | | | | | | | | | | | |
| Antenna Height | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Session Beginning | | 1 st | M | 2 nd | M | 3 rd | M | Ave 4.685 Feet M | | | | | | | | | | | | | | | | | | | | | | | |
| Session End | | 1 st | M | 2 nd | M | 3 rd | M | Ave M | | | | | | | | | | | | | | | | | | | | | | | |
| Rover Receiver | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type TRIMBLE | | Model 5800 | | | | Serial Number 4253117118 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Approximate Distance From Base Station | | Miles | Antenna Type 5800 INTERNAL | | | | Antenna Height 6.6 FT | | | | | | | | | | | | | | | | | | | | | | | | |
| Station Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Observation Type | | <input checked="" type="radio"/> RTK | FAST STATIC | STATIC | OTHER | | | | | | | | | | | | | | | | | | | | | | | | | | |
| First Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Station Name (M1) | | 5 | 4 | 0 | 1 | 0 | 0 | Description S 1/4 corner Sec. 35 | | | | | | | | | | | | | | | | | | | | | | | |
| Occupation time | | PDOP Best | | | | RMS Best | | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of Measurements 60 | | PDOP Worst 3.9 | | | | RMS Worst 6.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Second Observation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Station Name (M2) | | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Occupation time | | PDOP Best | | | | RMS Best | | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of Measurements | | PDOP Worst | | | | RMS Worst | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inverse Distance Between M1 and M2 | | FT | Alternate Base Station Used | | | | Yes | No | | | | | | | | | | | | | | | | | | | | | | | |
| Monument and Markings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type / Size | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stone | | Pipe/Cap | | | | Post | | Other | | | | | | | | | | | | | | | | | | | | | | | |
| Size | | Size 2½ / 3¼ 1969 BLM | | | | Size | | Size | | | | | | | | | | | | | | | | | | | | | | | |
| Material | | Material steel / brass | | | | Material | | Material | | | | | | | | | | | | | | | | | | | | | | | |

Sketch/Rubbing or Attach Photo of GPS Station Occupied
Show rotation of stampings/markings relative to North and describe briefly

See Emery County Land Survey Monument Record Sheet 1510540100

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-22-05

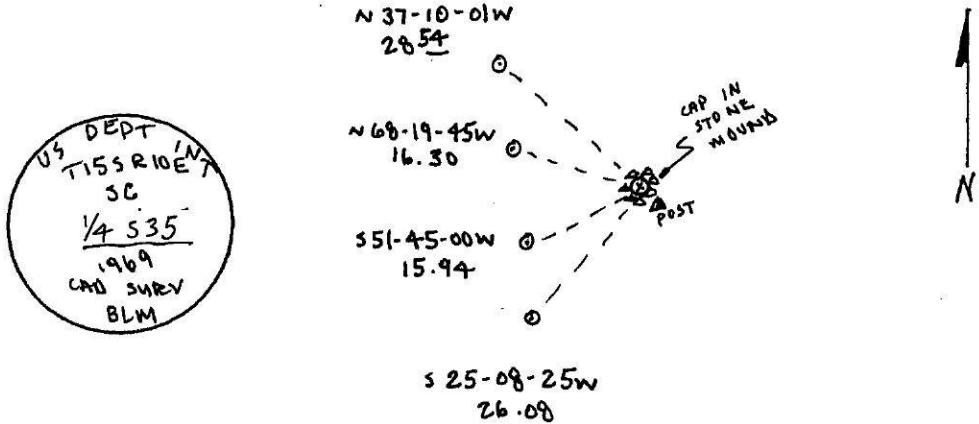
County Reference No. 1510540100

Type of Monument: Section Corner ✓ Quarter Corner
 Bench Mark Other

Your Description and Observation of Monument Found (Be Specific):
 1969 BLM BRASS 12" ABOVE GROUND LEVEL IN A STONE MOUND WITH A STEEL
 FENCE POST DRIVEN ALONGSIDE CAP.

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the
 Location of this Point: SET A ~~4~~ REBAR AS SHOWN BELOW.

Sketch showing Relative Location of Monument Accessories and Two Reference Points Stating Whether
 Found or Set. Show Supporting and/or Contradictory Evidence where Applicable. Include North Arrow.

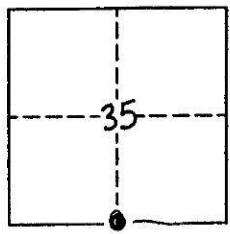


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Firm name and/or Surveyor: Johansen & Tuttle Eng.
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Location Diagram:
 Section: 35
 Township: 15S
 Range: 10E



Craig Johansen
 LICENSED LAND SURVEYOR
 No. 146602
 CRAIG E. JOHANSEN
 Date 12-12-05
 STATE OF UTAH