

PLSS GPS Observation Sheet

Project Name SL T16S R11E (Meridian Township Range)		Township T 1 6		1/2 (2)	N S	Range 1 1		1/2 (2)	E W	Section		Meridian (SL) US		
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/30/05						
Contacts Phone (435) 381-2523														
Control Station														
Name CP - 1		Type COR HARN TRI <input checked="" type="checkbox"/> Other Local Survey							Accuracy Order					
USGS Quad Name OLSEN RESERVOIR UTAH		Datum Nad27 Nad83 <input checked="" type="checkbox"/> Nad83 (1994) WGS84 Local							State UTAH County EMERY					
Latitude N 3 9 - 2 6 - 1 6 . 2 0 1 4 5						Longitude W 1 1 0 - 4 2 - 2 8 . 1 7 5 6 3								
Northing 6 9 6 4 9 6 8 . 4 0						Easting 1 8 6 4 1 4 7 . 1 2								
Units Survey Foot <input type="checkbox"/> International Foot <input checked="" type="checkbox"/> Meter		Coordinate Type State Plane <input checked="" type="checkbox"/> UTM		Zone Utah North <input type="checkbox"/> Utah Central <input checked="" type="checkbox"/> Utah South		Vertical Datum NGVD29 <input type="checkbox"/> NAVD88 <input checked="" type="checkbox"/>		Ellipsoid Height M 5481.181 FT					Geoid Height M 5538.90 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" M		2 nd M		3 rd M		Ave 4.157 Feet M		Session End				
		1" 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)		3 0 0 6 4 0		Description E 1/4 corner Sec. 5										
Occupation time		PDOP Best				RMS Best								
Number of Measurements 60		PDOP Worst 1.4				RMS Worst 9.5								
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 2 1/2 / 3 1/4 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 1611300640

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 12-01-05

County Reference No. 1611300640

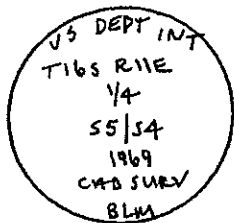
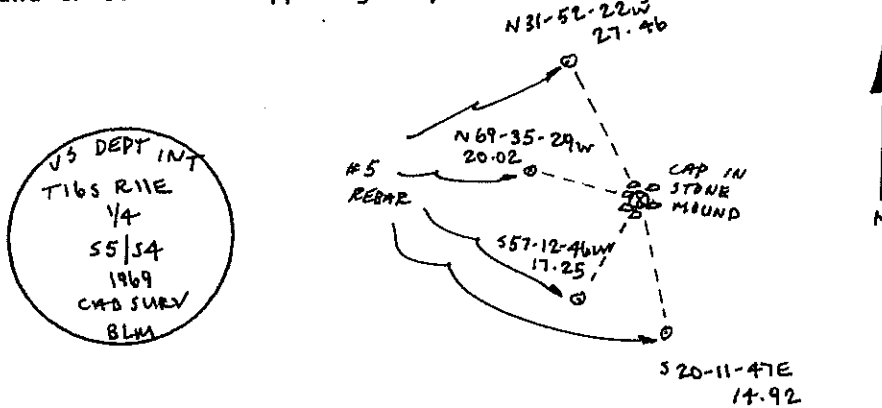
Type of Monument: _____ Section Corner
 _____ Bench Mark

Quarter Corner
 _____ Other _____

Your Description and Observation of Monument Found (Be Specific):
1969 BLM BRASS CAP IN STONE MOUND

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the Location of this Point: SET 4 #5 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.

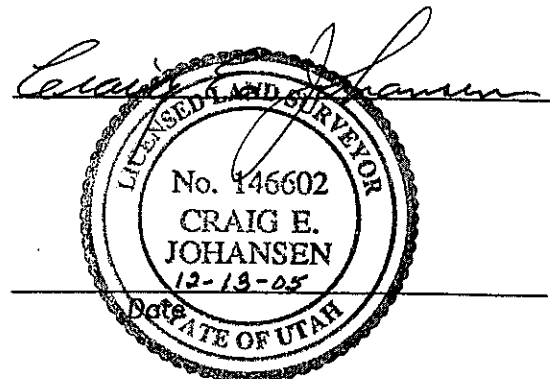
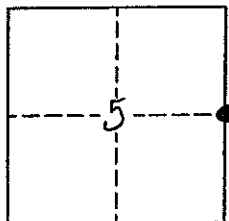
Address: 90 S. 100 E. Castle Dale, Utah 84513

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: 5
 Township: 16S
 Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E (Meridian Township Range)		Township T 1 6		¼ (2)	N S	Range 1 1		¼ (2)	E W	Section		Meridian (SL) US	
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/30/05					
Contacts Phone (435) 381-2523													
Control Station													
Name CP - 1		Type COR HARN TRI <input checked="" type="checkbox"/> Other Local Survey						Accuracy Order					
USGS Quad Name OLSEN RESERVOIR UTAH		Datum Nad27 Nad83 <input checked="" type="checkbox"/> Nad83 (1994) WGS84 Local						State UTAH County EMERY					
Latitude N 3 9 - 2 6 - 1 6 . 2 0 1 4 5							Longitude W 1 1 0 - 4 2 - 2 8 . 1 7 5 6 3						
Northing 6 9 6 4 9 6 8 . 4 0							Easting 1 8 6 4 1 4 7 . 1 2						
Units Survey Foot <input checked="" type="checkbox"/> International Foot Meter		Coordinate Type State Plane UTM											
Zone Utah North <input checked="" type="checkbox"/> Utah Central Utah South		Vertical Datum NGVD29 <input checked="" type="checkbox"/> NAVD88											
Ellipsoid Height M 5481.181 FT		Geoid Height M 5538.90 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" M 2" M 3" M		Ave 4.157 Feet M									
Session End		1" M 2" M 3" M		Ave									
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)		3 0 0 6 0 0		Description SE corner Sec. 5									
Occupation time		PDOP Best				RMS Best							
Number of Measurements 60		PDOP Worst 1.9				RMS Worst 13.1							
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 1611300600

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 12-1-05

County Reference No. 161/300600

Type of Monument: Section Corner
 Bench Mark

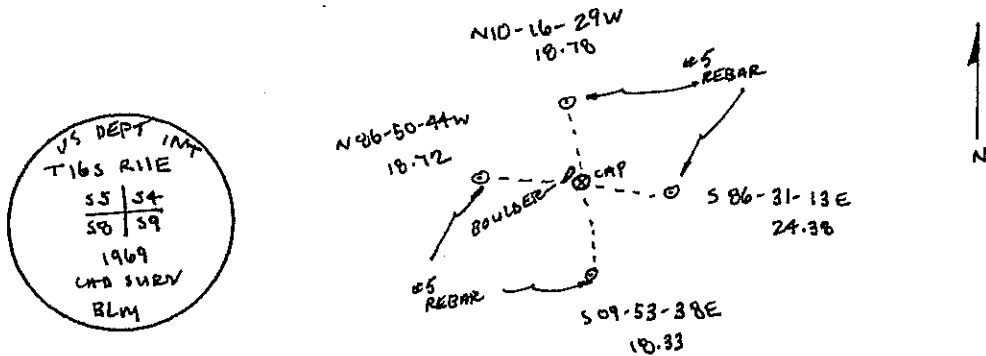
Quarter Corner
 Other _____

Your Description and Observation of Monument Found (Be Specific):

1969 BLM BRASS CAP 4" ABOVE GROUND LEVEL WITH A BOULDER PLANTED ALONGSIDE

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the Location of this Point: SET 4 #5 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

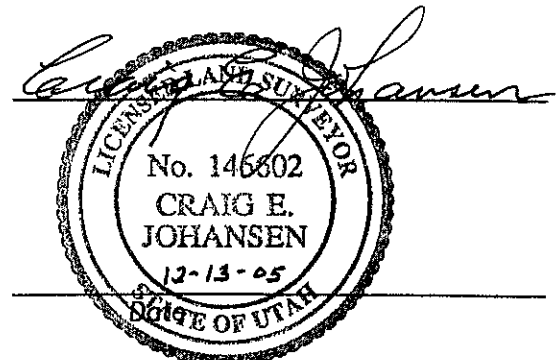
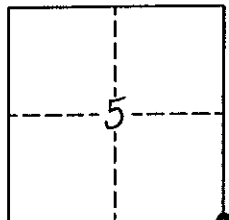
This is to certify that I was in responsible charge of the surveying work described in this record and that to the best of my knowledge the information presented herein is true and correct.

Location Diagram:

Section: 5

Township: 16S

Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E (Meridian Township Range)		Township T 1 6		1/2 (2)	N S	Range 1 1		1/2 (2)	E W	Section		Meridian (SL) US																				
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 12/01/05																								
Contacts Phone (435) 381-2523																																
Control Station																																
Name CP - 1		Type COR HARN TRI <u>Other</u> Local Survey						Accuracy Order																								
USGS Quad Name OLSEN RESERVOIR UTAH		Datum Nad27 Nad83 <u>Nad83 (1994)</u> WGS84 Local						State UTAH County EMERY																								
Latitude							Longitude																									
N	3	9	-	2	6	-	1	6	.	2	0	1	4	5	W	1	1	0	-	4	2	-	2	8	.	1	7	5	6	3		
Northing							Easting																									
6	9	6	4	9	6	8	.	4	0						1	8	6	4	1	4	7	.	1	2								
Units Survey Foot <u>International Foot</u> Meter		Coordinate Type <u>State Plane</u> UTM																														
Zone Utah North <u>Utah Central</u> Utah South		Vertical Datum NGVD29 <u>NAVD88</u>																														
Ellipsoid Height M 5481.181 FT		Geoid Height M 5538.90 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" M		2" M		3" M		Ave 4.206 Feet M																								
Session End		1" M		2" M		3" 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 <u>RTK</u> FAST STATIC STATIC OTHER																																
First Observation																																
Station Name (M1)		3 0 0 7 0 0 C C		Description NE corner Sec. 5																												
Occupation time		PDOP Best				RMS Best																										
Number of Measurements 60		PDOP Worst 1.9				RMS Worst 11.9																										
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 2 1/2 / 3 1/4 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 1611300700 CC

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 12-01-05

County Reference No. 1611300700 CC

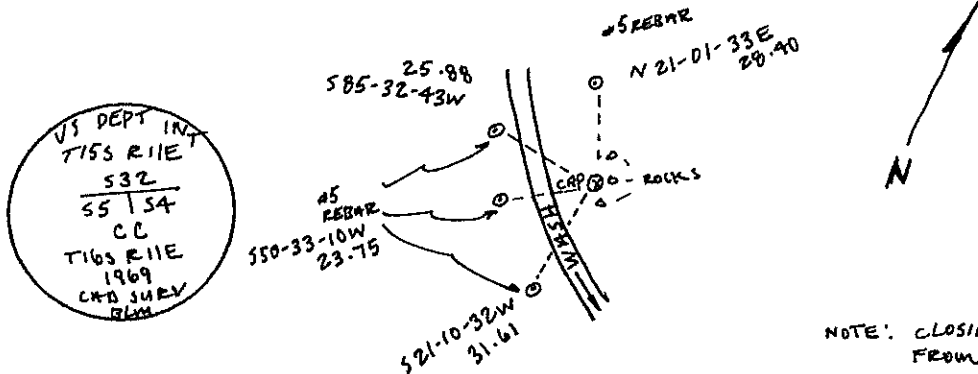
Type of Monument: Section Corner
 Bench Mark

Quarter Corner
 Other CLOSING CORNER

Your Description and Observation of Monument Found (Be Specific):
 1969 BLM BRASS CAP 8" ABOVE GROUND LEVEL

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the Location of this Point: SET 4 #5 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.



NOTE: CLOSING CORNER IS 500-33-16E 0.20 FROM ACTUAL CORNER LOCATION

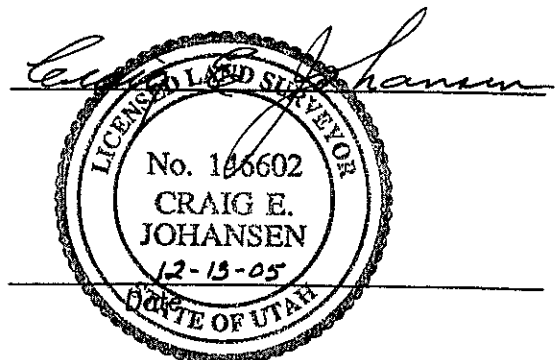
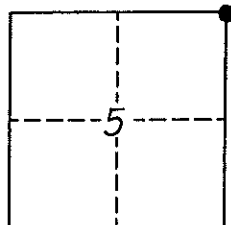
Certification:

Firm name and/or Surveyor: Johansen & Tuttle Eng.

Address: 90 S. 100 E. Castle Dale, Utah 84513 Phone: (435) 381-2523

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Location Diagram:
 Section: 5
 Township: 16S
 Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E <small>(Meridian Township Range)</small>				Township T 1 6			1/2 N (2) S		Range 1 1		1/2 E (2) W		Section 1 1		Meridian (SL) US																
Contacts Name Lee M. Swasey				Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 12/01/05																					
Contacts Phone (435) 381-2523																															
Control Station																															
Name CP - 1				Type <input checked="" type="checkbox"/> Other <input type="checkbox"/> Local Survey						Accuracy Order																					
USGS Quad Name OLSEN RESERVOIR UTAH				Datum <input type="checkbox"/> Nad27 <input type="checkbox"/> Nad83 <input checked="" type="checkbox"/> Nad83 (1994) <input type="checkbox"/> WGS84 <input type="checkbox"/> Local						State UTAH																					
				County EMERY																											
Latitude								Longitude																							
N	3	9	-	2	6	-	1	6	.	2	0	1	4	5	W	1	1	0	-	4	2	-	2	8	.	1	7	5	6	3	
Northing								Easting																							
6	9	6	4	9	6	8	.	4	0						1	8	6	4	1	4	7	.	1	2							
Units <input type="checkbox"/> Survey Foot <input checked="" type="checkbox"/> International Foot <input type="checkbox"/> Meter				Coordinate Type <input type="checkbox"/> State Plane <input checked="" type="checkbox"/> UTM																											
Zone <input type="checkbox"/> Utah North <input checked="" type="checkbox"/> Utah Central <input type="checkbox"/> Utah South				Vertical Datum <input type="checkbox"/> NGVD29 <input checked="" type="checkbox"/> NAVD88																											
Ellipsoid Height M 5481.181 FT				Geoid Height M 5538.90 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" M 2" M 3" M				Ave 4.206 Feet M																							
Session End				1" M 2" M 3" 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) 2 4 0 7 0 0 C C				Description N 1/4 corner Sec. 5																											
Occupation time				PDOP Best				RMS Best																							
Number of Measurements 60				PDOP Worst 2.1				RMS Worst 17.8																							
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 2 1/2 / 3/4 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 1611240700 CC

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 12-01-05

County Reference No. 1611240700

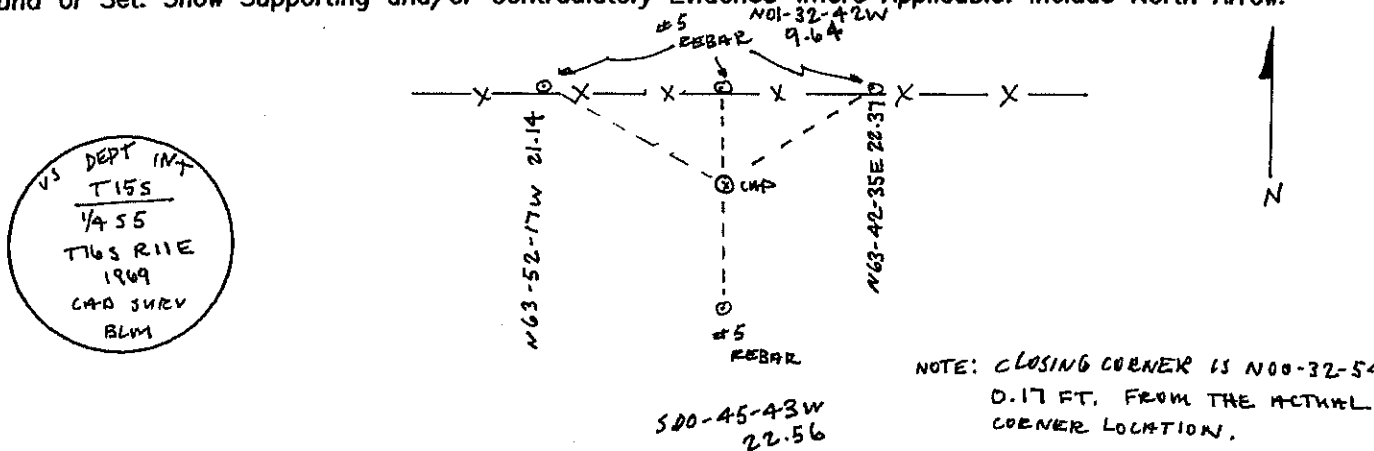
Type of Monument: _____ Section Corner
 _____ Bench Mark

Quarter Corner
 _____ Other _____

Your Description and Observation of Monument Found (Be Specific):
 1969 BLM BRASS CAP 8" ABOVE GROUND LEVEL

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the Location of this Point: SET 4 #5 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.



NOTE: CLOSING CORNER IS N00-32-54 0.17 FT. FROM THE ACTUAL CORNER LOCATION.

Certification:

Firm name and/or Surveyor: Johansen & Tuttle Eng.

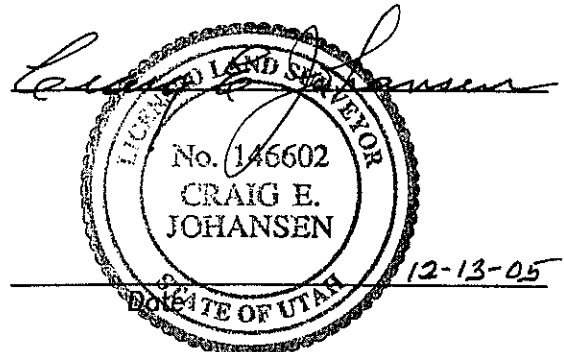
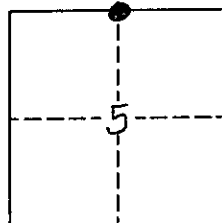
Address: 90 S. 100 E. Castle Dale, Utah 84513

Phone: (435) 381-2523

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Location Diagram:

Section: 5
 Township: 16S
 Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E (Meridian Township Range)		Township T 1 6		1/2 (2)	N S	Range 1 1		1/2 (2)	E W	Section		Meridian (SL) US																			
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/30/05																							
Contacts Phone (435) 381-2523																															
Control Station																															
Name CP - 1		Type COR HARN TRI <input checked="" type="radio"/> Other Local Survey							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	6	-	1	6	.	2	0	1	4	5	W	1	1	0	-	4	2	-	2	8	.	1	7	5	6	3	
Northing						Easting																									
6	9	6	4	9	6	8	.	4	0						1	8	6	4	1	4	7	.	1	2							
Units Survey Foot <input type="radio"/> International Foot <input checked="" type="radio"/> Meter		Coordinate Type State Plane <input checked="" type="radio"/> UTM		Zone Utah North <input type="radio"/> Utah Central <input checked="" type="radio"/> Utah South		Vertical Datum NGVD29 <input type="radio"/> NAVD88 <input checked="" type="radio"/>		Ellipsoid Height M 5481.181 FT					Geoid Height M 5538.90 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" M		2" M		3" M		Ave 4.157 Feet M																							
Session End		1" M		2" M		3" 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 <input type="radio"/> FAST STATIC <input type="radio"/> STATIC <input type="radio"/> OTHER																															
First Observation																															
Station Name (M1)		2 2 0 6 0 0		Description W 1/16 corner Sec. 5 / Sec. 8																											
Occupation time		PDOP Best				RMS Best																									
Number of Measurements 60		PDOP Worst 2.2				RMS Worst 17.7																									
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 2 1/2 / 3 1/4 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 1611220600

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-30-05

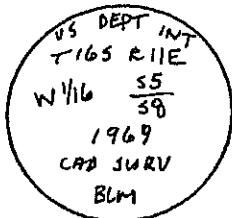
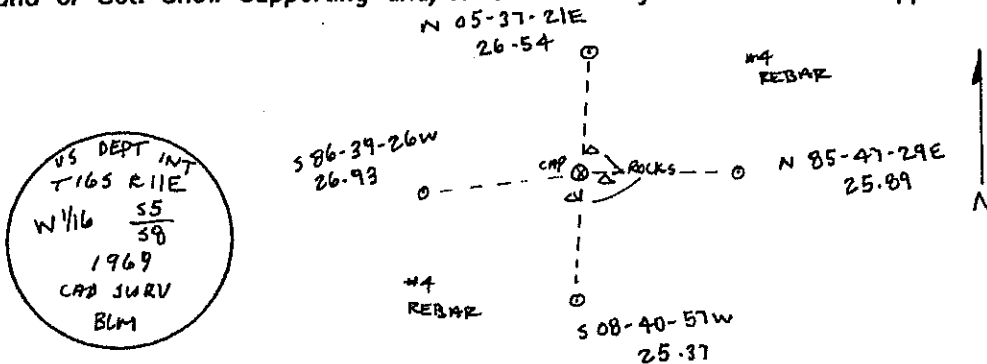
County Reference No. 161220600

Type of Monument: Section Corner Quarter Corner
 Bench Mark Other 1/16 CORNER

Your Description and Observation of Monument Found (Be Specific):
1969 BLM BRASS CAP 6" ABOVE GROUND LEVEL

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the Location of this Point: SET 4 #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.

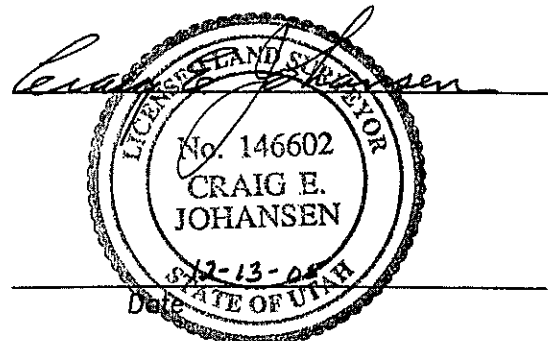
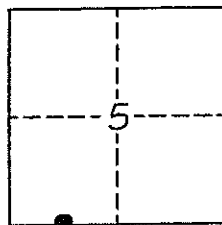


Certification:

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: 5
 Township: 16S
 Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E <small>(Meridian Township Range)</small>		Township T 1 6			Range 1 1		Section E W		Meridian SL US																						
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING					Date 11/30/05																								
Contacts Phone (435) 381-2523																															
Control Station																															
Name CP - 1		Type COR HARN TRI Other Local Survey						Accuracy Order																							
USGS Quad Name OLSEN RESERVOIR UTAH		Datum Nad27 Nad83 Nad83 (1994) WGS84 Local						State UTAH																							
								County EMERY																							
Latitude					Longitude																										
N	3	9	-	2	6	-	1	6	.	2	0	1	4	5	W	1	1	0	-	4	2	-	2	8	.	1	7	5	6	3	
Northing					Easting																										
6	9	6	4	9	6	8	.	4	0						1	8	6	4	1	4	7	.	1	2							
Units		Survey Foot		International Foot		Meter		Coordinate Type			State Plane		UTM																		
Zone		Utah North		Utah Central		Utah South		Vertical Datum			NGVD29		NAVD88																		
Ellipsoid Height		M		5481.181 FT		Geoid Height		M		5538.90 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 4.157 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		RTK		FAST STATIC		STATIC		OTHER																							
First Observation																															
Station Name (M1)		2 0 0 6 4 0		Description W 1/4 corner Sec. 5																											
Occupation time		PDOP Best				RMS Best																									
Number of Measurements 60		PDOP Worst 2.9				RMS Worst 13.7																									
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 2 1/2 / 3 1/4 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 1611200640

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-30-05

County Reference No. 161200640

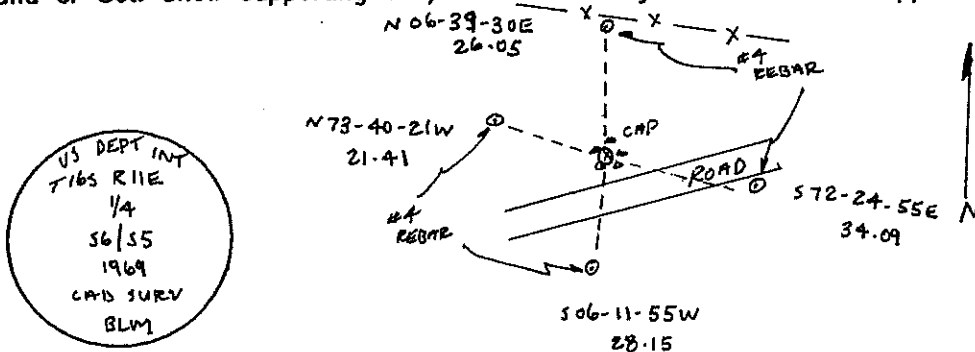
Type of Monument: _____ Section Corner
 _____ Bench Mark

Quarter Corner
 _____ Other _____

Your Description and Observation of Monument Found (Be Specific):
1969 BLM BRASS CAP 6" ABOVE GROUND LEVEL

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

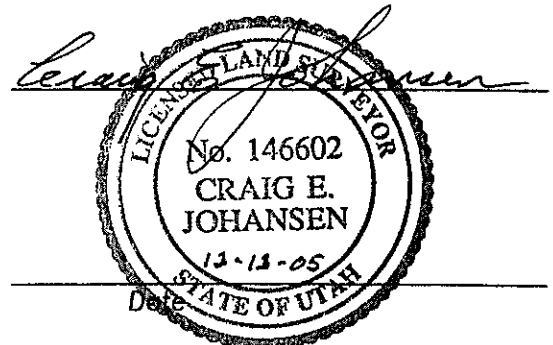
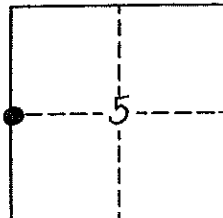
Firm name and/or Surveyor: Johansen & Tuttle Eng.

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: 5
 Township: 16S
 Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E <small>(Meridian Township Range)</small>		Township T 1 6		½ (2)	N S	Range 1 1		½ (2)	E W	Section		Meridian SL US																				
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/30/05																								
Contacts Phone (435) 381-2523																																
Control Station																																
Name CP - 1		COR		HARN		TRI		Type <input checked="" type="checkbox"/> Other <input type="checkbox"/> Local Survey			Accuracy Order																					
USGS Quad Name OLSEN RESERVOIR UTAH		Nad27		Nad83		<input checked="" type="checkbox"/> Nad83 (1994)		WGS84		Local		State UTAH																				
												County EMERY																				
Latitude						Longitude																										
N	3	9	-	2	6	-	1	6	.	2	0	1	4	5	W	1	1	0	-	4	2	-	2	8	.	1	7	5	6	3		
Northing						Easting																										
6	9	6	4	9	6	8	.	4	0						1	8	6	4	1	4	7	.	1	2								
Units		Survey Foot		<input checked="" type="checkbox"/> International Foot		Meter		Coordinate Type			<input checked="" type="checkbox"/> State Plane		UTM																			
Zone		Utah North		<input checked="" type="checkbox"/> Utah Central		Utah South		Vertical Datum			NGVD29		<input checked="" type="checkbox"/> NAVD88																			
Ellipsoid Height		M		5481.181 FT		Geoid Height			M		5538.90 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"		M		2"		M		3"		M		Ave 4.157 Feet M																		
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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)		2 0 0 6 0 0		Description SW corner Sec. 5																												
Occupation time				PDOP Best		RMS Best																										
Number of Measurements		60		PDOP Worst 2.7		RMS Worst 11.1																										
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 1611200600

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-30-05

County Reference No. 1611200600

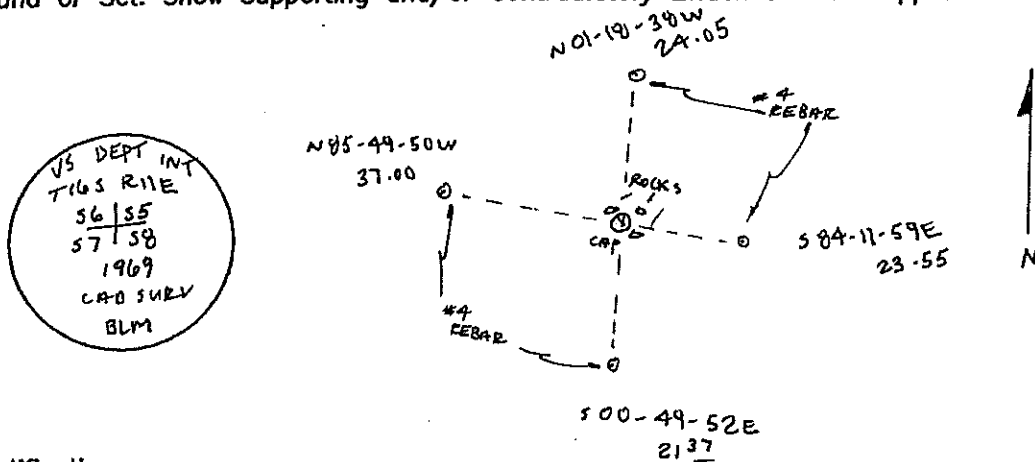
Type of Monument: Section Corner
 Bench Mark

Quarter Corner
 Other _____

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Firm name and/or Surveyor: Johansen & Tuttle Eng.

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Location Diagram:

Section: 5
 Township: 16S
 Range: 11E

