

PLSS GPS Observation Sheet

Project Name SL T16S R11E (Meridian Township Range)		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		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 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="radio"/> International Foot Meter			Coordinate Type State Plane UTM			Zone Utah North <input checked="" type="radio"/> Utah Central Utah South			Vertical Datum NGVD29 <input checked="" type="radio"/> 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 <input checked="" type="radio"/> RTK FAST STATIC STATIC OTHER												
First Observation												
Station Name (M1) 3 0 0 3 0 0		Description SE corner Sec. 20										
Occupation time		PDOP Best				RMS Best						
Number of Measurements 60		PDOP Worst 1.3				RMS Worst 14.7						
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 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 1611300300

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 12-1-05

County Reference No. 1611300300

Type of Monument: Section Corner
 Bench Mark

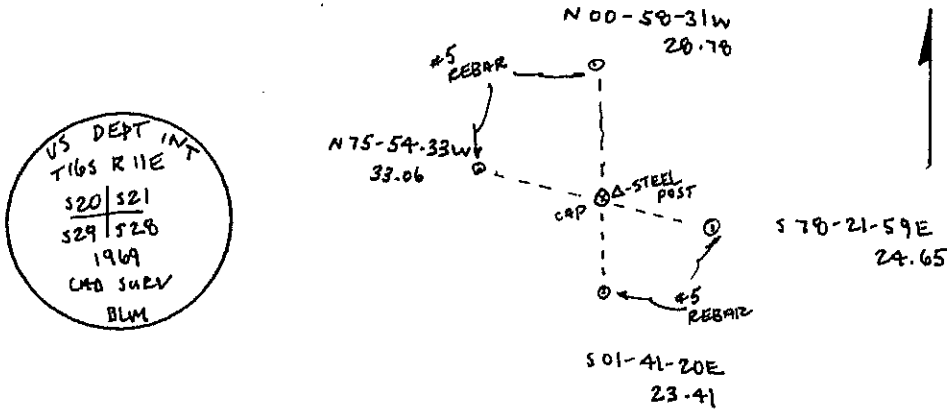
Quarter Corner
 Other

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

1969 BLM BRASS CAP 9" ABOVE GROUND LEVEL WITH #5 STEEL POST DRIVEN 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

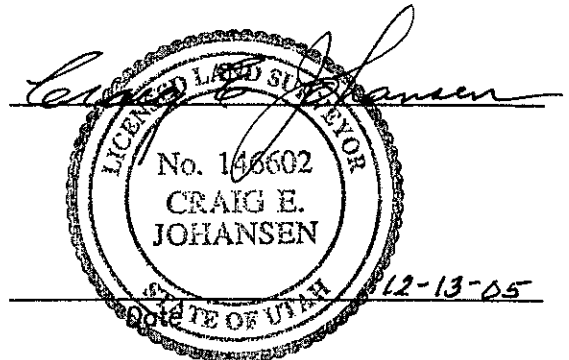
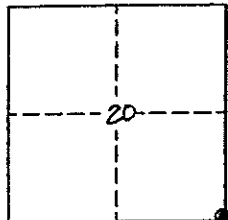
This is to certify that I was in responsible charge of the surveying work described in this record and that to the best of my knowledge the information presented herein is true and correct.

Location Diagram:

Section: 20

Township: 16S

Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E <small>(Meridian Township Range)</small>		Township		½ (2)	N S	Range		½ (2)	E W	Section		Meridian																			
		T	1	6	S	1	1		E			(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 <input type="radio"/> 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 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		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 <input checked="" type="radio"/> RTK <input type="radio"/> FAST STATIC <input type="radio"/> STATIC <input type="radio"/> OTHER																															
First Observation																															
Station Name (M1)		2		4		0		3		0		0		Description S 1/4 corner Sec. 20																	
Occupation time		PDOP Best				RMS Best																									
Number of Measurements 60		PDOP Worst 0.9				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 1611240300

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-30-05

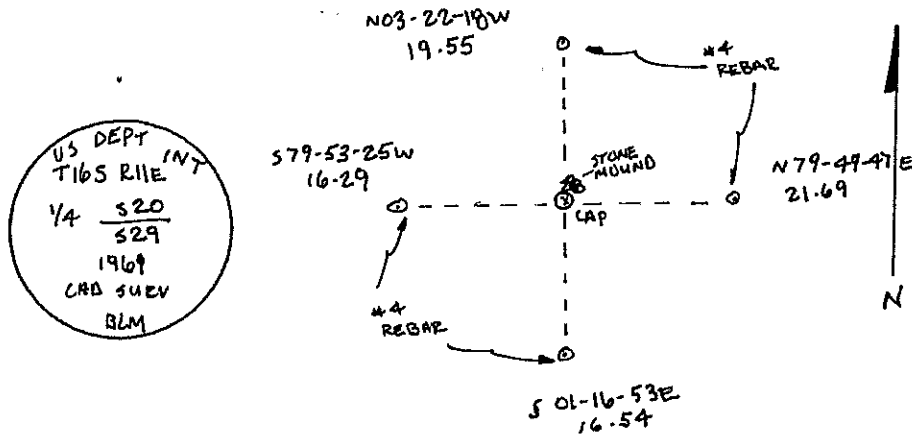
County Reference No. 1611240300

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

Your Description and Observation of Monument Found (Be Specific):
 1969 BLM BRASS CAP 7" ABOVE GROUND LEVEL WITH A SMALL STONE MOUND TO THE NORTH

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.

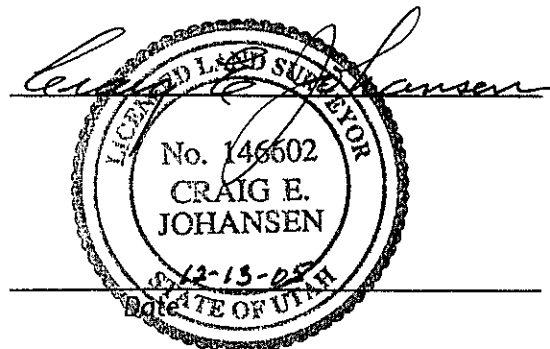
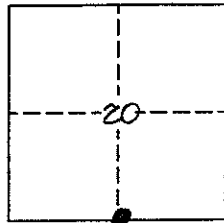


Certification:

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

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Location Diagram:
 Section: 20
 Township: 16S
 Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E <small>(Meridian Township Range)</small>				Township			½ (2)	N S	Range		½ (2)	E W	Section		Meridian																																			
				T	1	6		S	1	1		E				(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								Accuracy																																						
				COR	HARN	TRI	(Other) Local Survey					Order																																						
USGS Quad Name OLSEN RESERVOIR UTAH				Datum								State UTAH																																						
Nad27		Nad83		(Nad83 1994)		WGS84		Local		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"		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 (RTK) FAST STATIC STATIC OTHER																																																		
First Observation																																																		
Station Name (M1)		3		0	0	3	4	0	Description E 1/4 corner Sec. 20																																									
Occupation time				PDOP Best				RMS Best																																										
Number of Measurements 60				PDOP Worst 2.8				RMS Worst 8.8																																										
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 2½ / 3¼ 1969 BLM RM's				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 1611300340

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-30-05

County Reference No. 1611300340

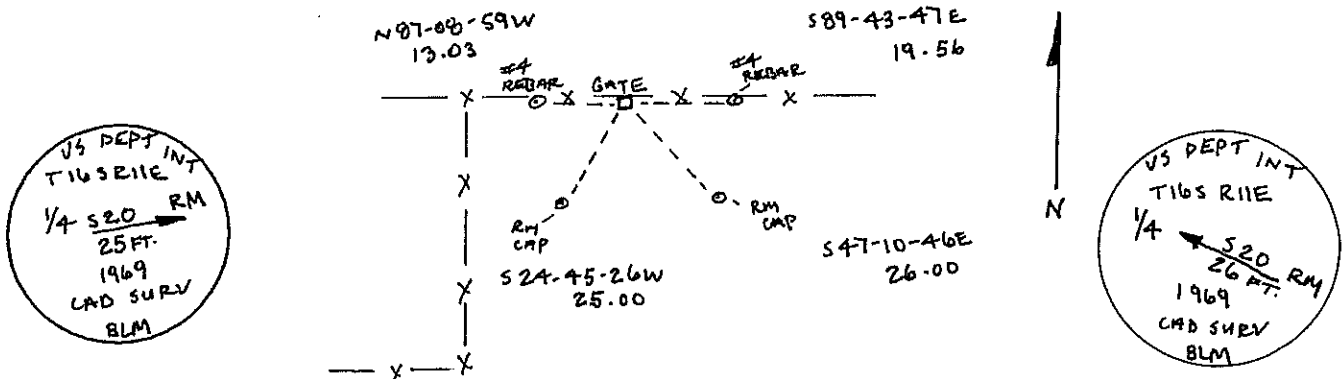
Type of Monument: _____ Section Corner
 _____ Bench Mark

Quarter Corner
 _____ Other _____

Your Description and Observation of Monument Found (Be Specific):
 2 1969 BLM BRASS CAPS SET AS REFERENCE MARKERS
 NO EVIDENCE OF ACTUAL CORNER FOUND

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the Location of this Point: SET 2 #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.

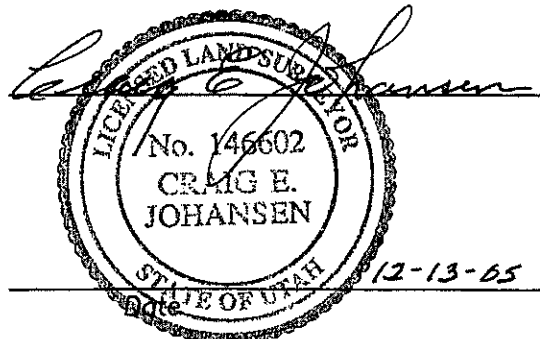
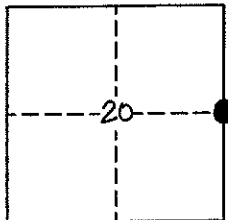


Certification:

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

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Location Diagram:
 Section: 20
 Township: 16S
 Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E <small>(Meridian Township Range)</small>		Township T 1 6			1/2 (2) N S S	Range 1 1		1/2 (2) E W E	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 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		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 <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		3		0		0		Description W 1/16 corner Sec. 20 / Sec. 29																		
Occupation time		PDOP Best						RMS Best																								
Number of Measurements 60		PDOP Worst 1.9						RMS Worst 96.1																								
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 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 1611220300

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-30-05

County Reference No. 1611220300

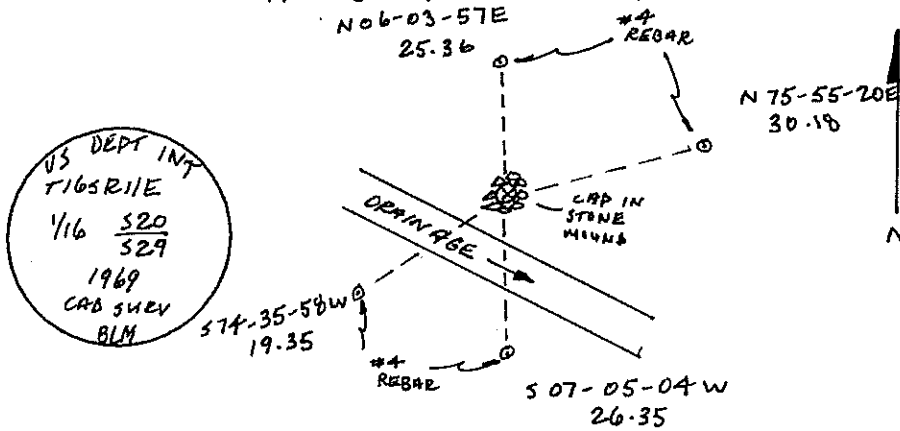
Type of Monument: _____ Section Corner
 _____ Bench Mark

Quarter Corner _____
 Other 1/16 CORNER

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

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

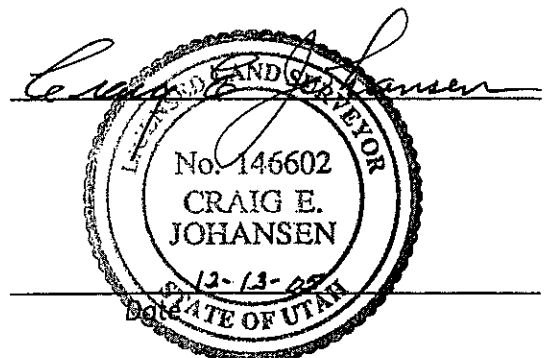
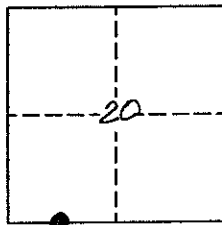
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Location Diagram:

Section: 20

Township: 16S

Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E (Meridian Township Range)				Township T 1 6			¼ N (2) S		Range 1 1			¼ E (2) W		Section			Meridian (SL) US														
Contacts Name Lee M. Swasey				Source Agency JOHANSEN & TUTTLE ENGINEERING								Date 11/28/05																			
Contacts Phone (435) 381-2523																															
Control Station																															
Name ELM GPS 12				Type COR HARN TRI <input checked="" type="checkbox"/> Other EMERY COUNTY								Accuracy Order																			
USGS Quad Name OLSEN RESERVOIR UTAH				Datum Nad27 Nad83 <input checked="" type="checkbox"/> 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 type="checkbox"/> International Foot <input checked="" type="checkbox"/> Meter				Coordinate Type State Plane <input 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 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" M				2" M				3" M				Ave 4.678 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) 2 0 0 3 0 0				Description SW corner Sec. 20																											
Occupation time				PDOP Best				RMS Best																							
Number of Measurements 60				PDOP Worst 1.8				RMS Worst 8.5																							
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 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 1611200300

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-28-05

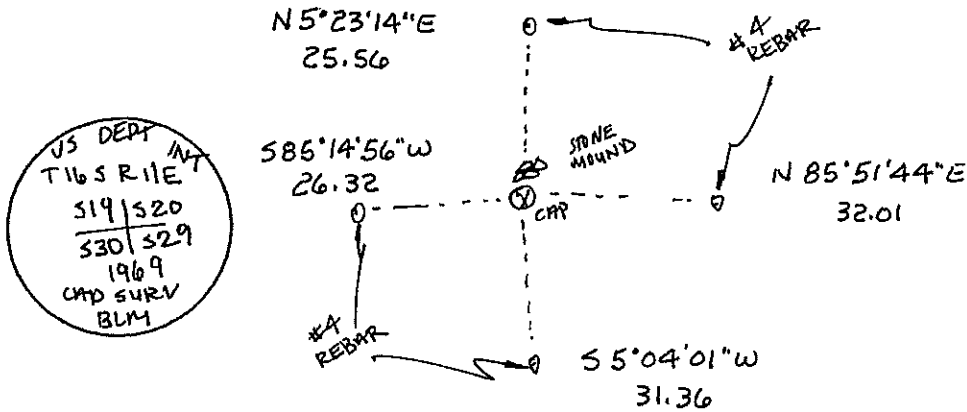
County Reference No. 1611200300

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

Your Description and Observation of Monument Found (Be Specific):
1969 BLM BRASS CAP 3" ABOVE GROUNDLEVEL WITH A STONE MOUND TO THE NORTH

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.

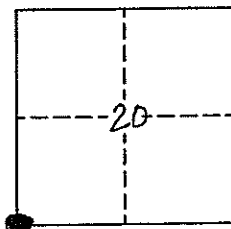


Certification:

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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: 20
 Township: 16S
 Range: 11E



Craig E. Johansen
 No. 146802
 CRAIG E. JOHANSEN
 STATE OF UTAH
 Date 12-13-05

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 11/28/05																								
Contacts Phone (435) 381-2523																															
Control Station																															
Name ELM GPS 12		Type COR HARN TRI <input checked="" type="checkbox"/> Other EMERY COUNTY					Accuracy Order																								
USGS Quad Name OLSEN RESERVOIR UTAH		Datum Nad27 Nad83 <input checked="" type="checkbox"/> 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="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		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"		M		2 nd		M		3 rd		M		Ave		4.678 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		FAST STATIC		STATIC		OTHER																							
First Observation																															
Station Name (M1)		2 0 0 3 4 0		Description						W 1/4 corner Sec. 20																					
Occupation time				PDOP Best				RMS Best																							
Number of Measurements		60		PDOP Worst		1.9		RMS Worst		11.8																					
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 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 1611200340

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-29-05

County Reference No. 1611200340

Type of Monument: Section Corner
 Bench Mark

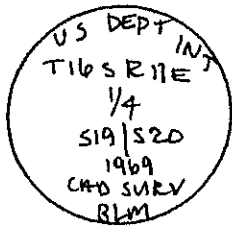
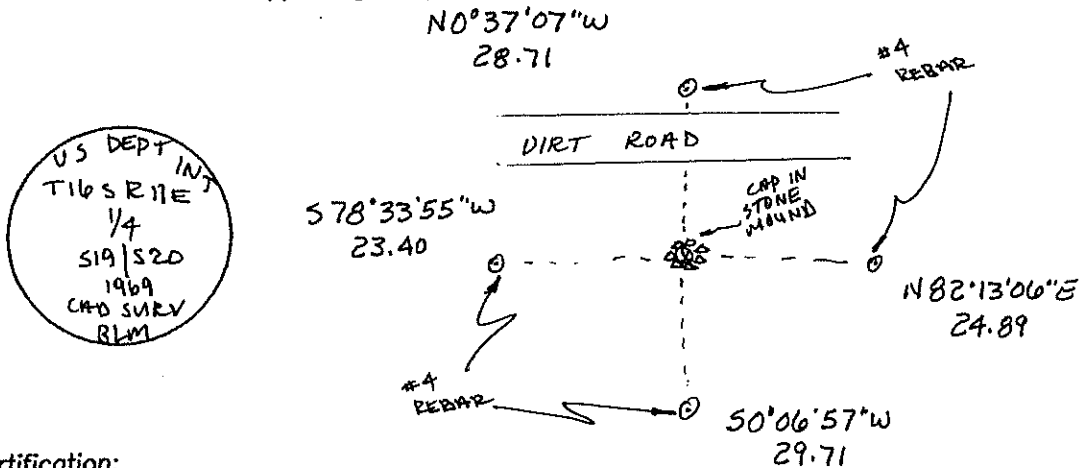
Quarter Corner
 Other _____

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

1969 BLM BRASS CAP IN A STONE MOUND

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

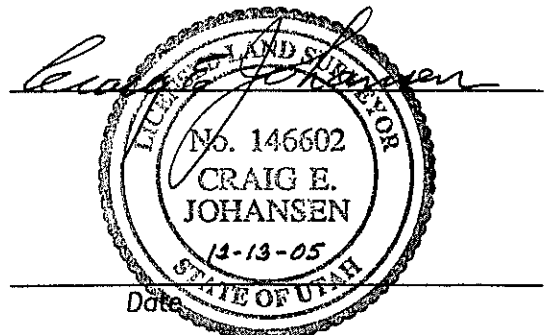
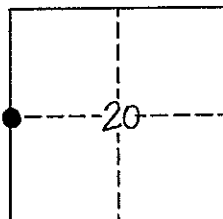
This is to certify that I was in responsible charge of the surveying work described in this record and that to the best of my knowledge the information presented herein is true and correct.

Location Diagram:

Section: 20

Township: 16S

Range: 11E



PLSS GPS Observation Sheet

Project Name SL T16S R11E (Meridian Township Range)				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 11/28/05																									
Contacts Phone (435) 381-2523																																			
Control Station																																			
Name ELM GPS 12				COR			HARN			TRI			Type Other EMERY COUNTY		Accuracy Order																				
USGS Quad Name OLSEN RESERVOIR UTAH				Datum 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 type="checkbox"/> International Foot <input checked="" type="checkbox"/> Meter <input type="checkbox"/>				Coordinate Type State Plane <input checked="" 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"				M				2 nd				M				3 rd				M				Ave 4.678 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)				2 0 0 4 0 0				Description NW corner Sec. 20																											
Occupation time				PDOP Best				RMS Best																											
Number of Measurements 60				PDOP Worst 1.6				RMS Worst 16.5																											
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 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 1611200400

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-29-05

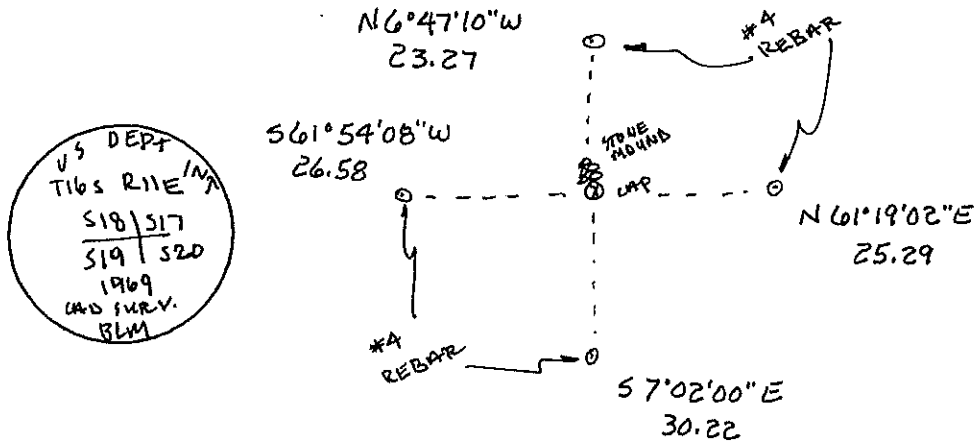
County Reference No. 1611200400

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

Your Description and Observation of Monument Found (Be Specific):
 1969 BLM BRASS CAP 6" ABOVE GROUND LEVEL WITH A STONE MOUND TO THE NORTH

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.



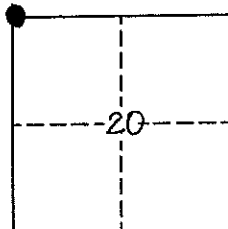
Certification:

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: 20
 Township: 16 S
 Range: 11 E



Date: 12-13-05