

PLSS GPS Observation Sheet

Project Name SL T17S R10E <small>(Meridian Township Range)</small>		Township T 1 7		1/2 (2)	N S	Range 1 0		1/2 (2)	E W	Section		Meridian SL US																							
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/15/05																											
Contacts Phone (435) 381-2523																																			
Control Station																																			
Name CLV GPS 11		Type COR HARN TRI Other EMERY COUNTY						Accuracy Order																											
USGS Quad Name CLEVELAND UTAH		Datum Nad27 Nad83 Nad83 (1994) WGS84 Local						State UTAH County EMERY																											
Latitude							Longitude																												
N	3	9	-	2	1	-	3	7	.	1	7	4	2	6	1	W	1	1	0	-	4	9	-	2	8	.	6	7	6	1	8				
Northing							Easting																												
6	9	3	6	4	6	8	.	5	7	1	8	3	1	3	7	2	.	4	6																
Units				Survey Foot		International Foot		Meter		Coordinate Type				State Plane		UTM																			
Zone		Utah North		Utah Central		Utah South		Vertical Datum				NGVD29		NAVD88																					
Ellipsoid Height				1735.93 M				FT				Geoid Height		M		5752.63 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		4.587 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														RTK		FAST STATIC		STATIC		OTHER															
First Observation																																			
Station Name (M1)		5		0		0		5		0		0		Description				NE corner Sec. 15																	
Occupation time				PDOP Best				RMS Best																											
Number of Measurements				60				PDOP Worst				2.3				RMS Worst		19.8																	
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		2 1/2 / 3 1/2		1969 BLM		Size		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 1710500500

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-15-05

County Reference No. 1710500500

Type of Monument: Section Corner
 Bench Mark

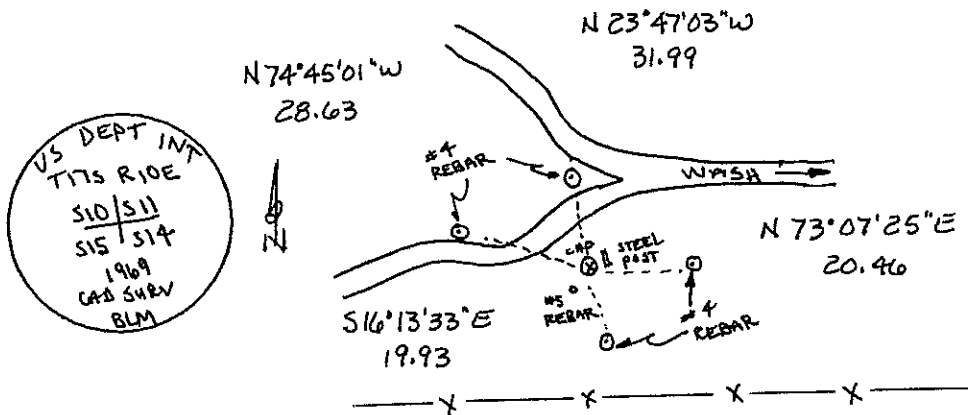
Quarter Corner
 Other _____

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

1969 BLM BRASS CAP 10" ABOVE GROUND LEVEL WITH A STEEL FENCE POST AND A #5 REBAR DRIVEN ALONGSIDE.

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:

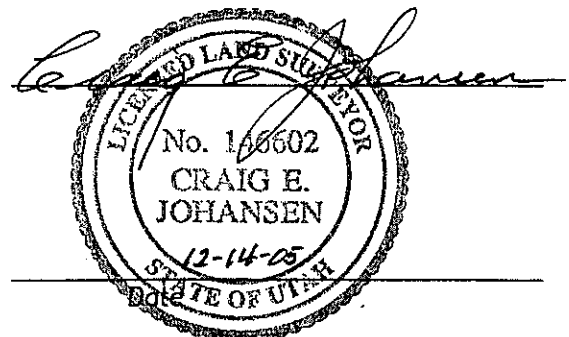
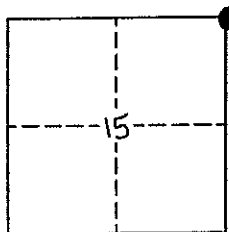
Firm name and/or Surveyor: Johansen & Tuttle Eng.

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: 15
 Township: 17S
 Range: 10E



PLSS GPS Observation Sheet

Project Name SL T17S R10E (Meridian Township Range)		Township T 1 7		1/2 (2)	N S	Range 1 0		1/2 (2)	E W	Section		Meridian (SL) US																		
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 12/07/05																						
Contacts Phone (435) 381-2523																														
Control Station																														
Name CP-WEST		Type COR HARN TRI Other LOCAL SURVEY						Accuracy Order																						
USGS Quad Name ELMO UTAH		Datum Nad27 Nad83 (Nad83 (1994)) WGS84 Local						State UTAH County EMERY																						
Latitude						Longitude																								
N	3	9	-	2	8	-	0	8	.	2	2	8	1	8	W	1	1	0	-	4	7	-	1	5	.	1	3	2	7	7
Northing						Easting																								
6	9	7	6	1	1	2	.	8	0						1	8	4	1	5	4	5	.	4	0						
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 4.311 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)		5		0	0	4	4	0	Description E 1/4 corner Sec. 15																					
Occupation time		PDOP Best				RMS Best																								
Number of Measurements 60		PDOP Worst 2.2				RMS Worst 24.1																								
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 / 3/4 2005 ECS				Size				Size																				
Material		Material alum. / alum.				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 1710500440

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 12-10-05

County Reference No. 1710500440

Type of Monument: _____ Section Corner
 _____ Bench Mark

Quarter Corner
 _____ Other _____

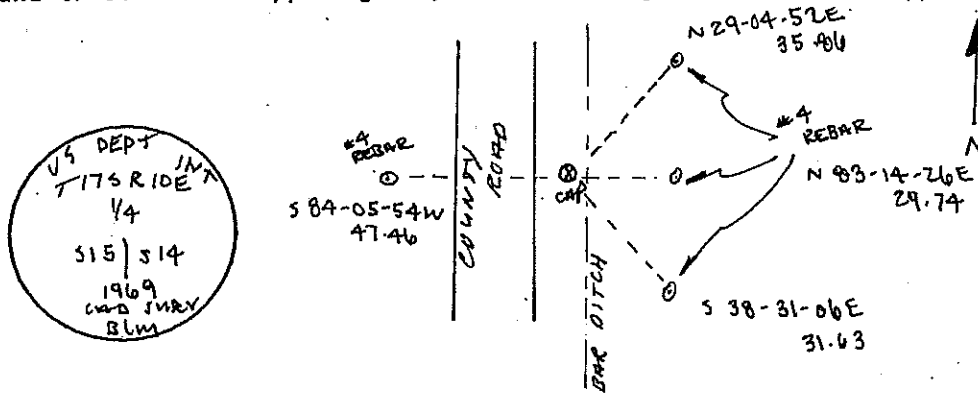
Your Description and Observation of Monument Found (Be Specific):

1969 BLM BRASS CAP LAYING ALONG SIDE OF COUNTY ROAD .

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the Location of this Point: RE-SET BLM BRASS CAP

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:

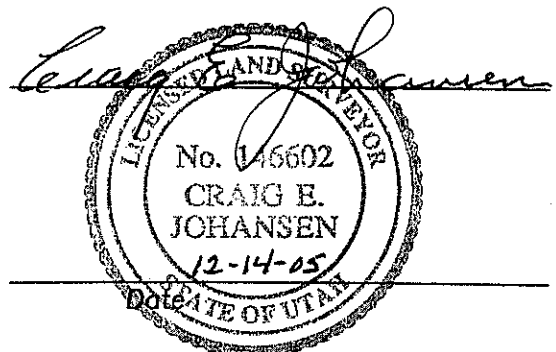
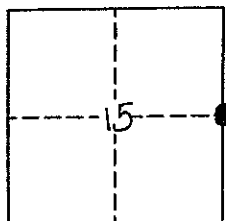
Firm name and/or Surveyor: Johansen & Tuttle Eng.

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: 15
 Township: 17S
 Range: 10E



PLSS GPS Observation Sheet

Project Name SL T17S R10E (Meridian Township Range)		Township T 1 7		1/2 (2)	N S	Range 1 0		1/2 (2)	E W	Section		Meridian (SL) US
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/15/05				
Contacts Phone (435) 381-2523												
Control Station												
Name CLV GPS 11		Type COR HARN TRI <input checked="" type="checkbox"/> Other EMERY COUNTY						Accuracy Order				
USGS Quad Name CLEVELAND UTAH		Datum Nad27 Nad83 <input checked="" type="checkbox"/> Nad83 (1994) WGS84 Local						State UTAH County EMERY				
Latitude N 3 9 - 2 1 - 3 7 . 1 7 4 2 6 1						Longitude W 1 1 0 - 4 9 - 2 8 . 6 7 6 1 8						
Northing 6 9 3 6 4 6 8 . 5 7						Easting 1 8 3 1 3 7 2 . 4 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 1735.93 M			Geoid Height 5752.63 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						
Antenna Height												
Session Beginning		1" M		2" M		3" M		Ave		4.587 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)		5 0 0 4 0 0		Description SE corner Sec. 15								
Occupation time		PDOP Best				RMS Best						
Number of Measurements 60		PDOP Worst 1.5				RMS Worst 28.9						
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 1/2 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 1710500400

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-15-05

County Reference No. 1710 500 400

Type of Monument: Section Corner
 Bench Mark

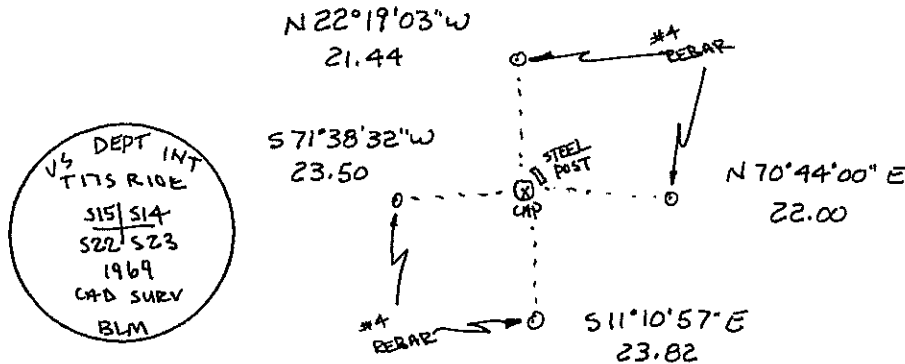
Quarter Corner
 Other _____

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

1969 BLM BRASS CAP 8" ABOVE GROUND LEVEL WITH A STEEL FENCE POST DRIVEN ALONG SIDE.

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

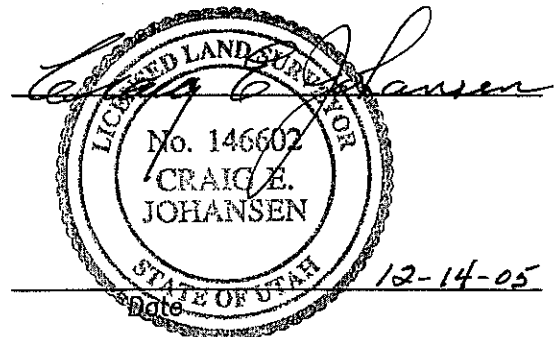
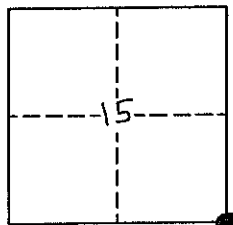
This is to certify that I was in responsible charge of the surveying work described in this record and that to the best of my knowledge the information presented herein is true and correct.

Location Diagram:

Section: 15

Township: 17S

Range: 10E



PLSS GPS Observation Sheet

Project Name SL T17S R10E (Meridian Township Range)		Township T 1 7		1/2 (2)	N S	Range 1 0		1/2 (2)	E W	Section		Meridian (SL) US																						
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/15/05																										
Contacts Phone (435) 381-2523																																		
Control Station																																		
Name CLV GPS 11		Type COR HARN TRI <input checked="" type="checkbox"/> Other EMERY COUNTY						Accuracy Order																										
USGS Quad Name CLEVELAND UTAH		Datum Nad27 Nad83 <input checked="" type="checkbox"/> Nad83 (1994) WGS84 Local						State UTAH County EMERY																										
Latitude							Longitude																											
N	3	9	-	2	1	-	3	7	.	1	7	4	2	6	1	W	1	1	0	-	4	9	-	2	8	.	6	7	6	1	8			
Northing							Easting																											
6	9	3	6	4	6	8	.	5	7							1	8	3	1	3	7	2	.	4	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		1735.93 M		FT		Geoid Height				M		5752.63 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		4.587 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)		4		4		0		4		0		0		Description S 1/4 corner Sec. 15																				
Occupation time				PDOP Best				RMS Best																										
Number of Measurements 60				PDOP Worst 1.6				RMS Worst 14.1																										
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 1/2 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 1710440400

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-15-05

County Reference No. 1710440400

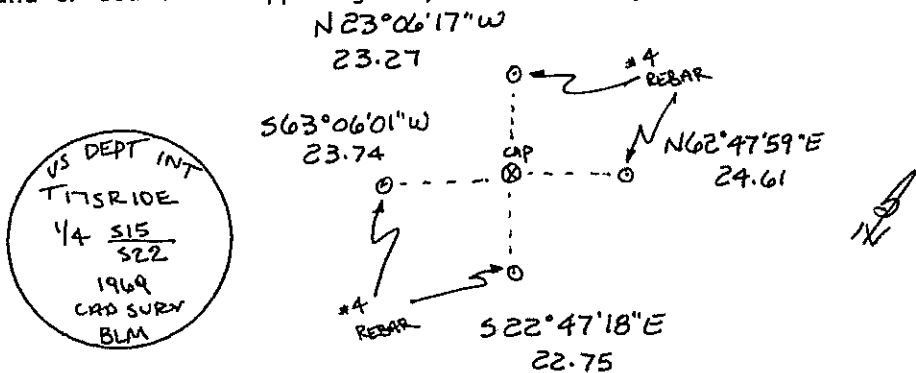
Type of Monument: Section Corner
 Bench Mark

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 #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.

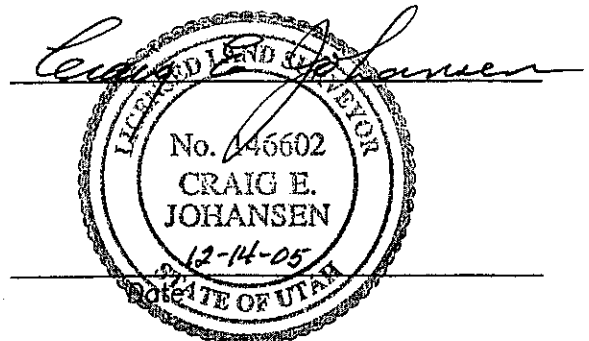
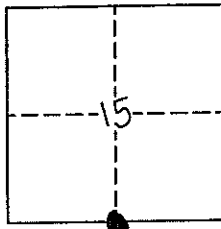


Certification:

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: 15
 Township: 17S
 Range: 10E



PLSS GPS Observation Sheet

Project Name SL T17S R10E (Meridian Township Range)		Township T 1 7		1/2 (2)	N S	Range 1 0		1/2 (2)	E W	Section		Meridian (SL) US																			
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/15/05																							
Contacts Phone (435) 381-2523																															
Control Station																															
Name CLV GPS 11		Type COR HARN TRI <input checked="" type="checkbox"/> Other EMERY COUNTY						Accuracy Order																							
USGS Quad Name CLEVELAND UTAH		Datum Nad27 Nad83 <input checked="" type="checkbox"/> Nad83 (1994) WGS84 Local						State UTAH County EMERY																							
Latitude							Longitude																								
N	3	9	-	2	1	-	3	7	.	1	7	4	2	6	1	W	1	1	0	-	4	9	-	2	8	.	6	7	6	1	8
Northing							Easting																								
6	9	3	6	4	6	8	.	5	7							1	8	3	1	3	7	2	.	4	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		1735.93 M		FT		Geoid Height				M		5752.63 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 4.587 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)		4		2		0		4		0		0		Description W 1/16 corner Sec. 15 / Sec. 22																	
Occupation time		PDOP Best				RMS Best																									
Number of Measurements 60		PDOP Worst 1.9				RMS Worst 18.0																									
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 2 1/2 / 3 1/2 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 1710420400

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-15-05

County Reference No. 1710420400

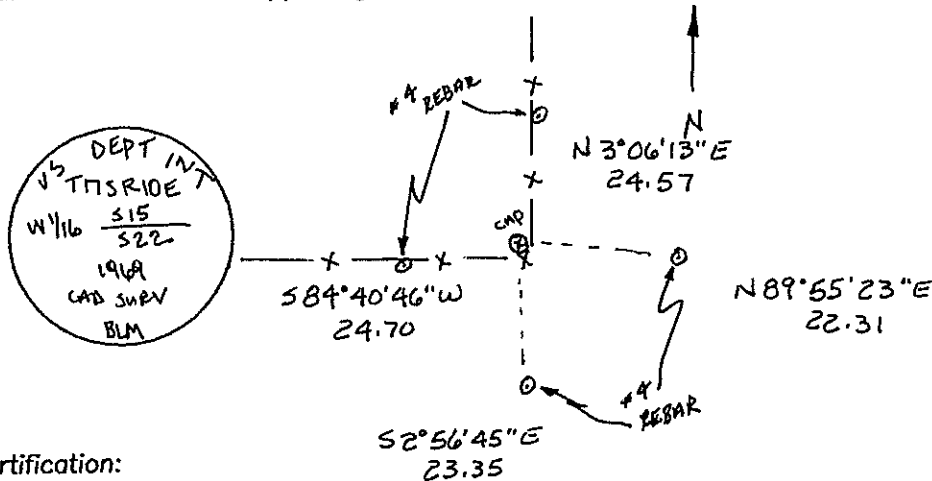
Type of Monument: Section Corner
 Bench Mark

 Quarter Corner
 Other 1/16 CORNER

Your Description and Observation of Monument Found (Be Specific):
1969 BLM BRASS CAP 10" 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

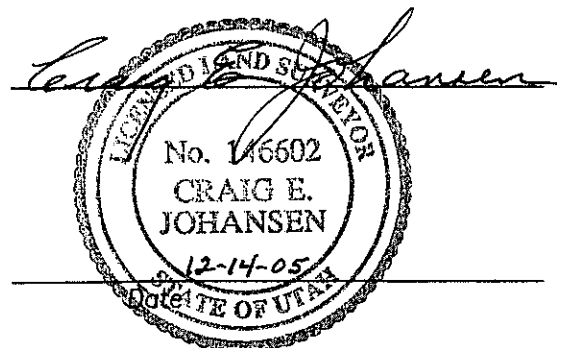
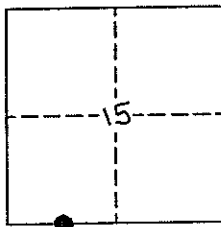
This is to certify that I was in responsible charge of the surveying work described in this record and that to the best of my knowledge the information presented herein is true and correct.

Location Diagram:

Section: 15

Township: 17S

Range: 10E



PLSS GPS Observation Sheet

Project Name SL T17S R10E (Meridian Township Range)				Township T 1 7		1/2 (2)	N S S	Range 1 0		1/2 (2)	E W E	Section		Meridian (SL) US			
Contacts Name Lee M. Swasey				Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/15/05							
Contacts Phone (435) 381-2523																	
Control Station																	
Name CLV GPS 11				Type COR HARN TRI <u>Other</u> EMERY COUNTY						Accuracy Order							
USGS Quad Name CLEVELAND UTAH				Datum Nad27 Nad83 <u>Nad83 (1994)</u> WGS84 Local						State UTAH County EMERY							
Latitude N 3 9 - 2 1 - 3 7 . 1 7 4 2 6 1								Longitude W 1 1 0 - 4 9 - 2 8 . 6 7 6 1 8									
Northing 6 9 3 6 4 6 8 . 5 7								Easting 1 8 3 1 3 7 2 . 4 6									
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 1735.93 M				FT				Geoid Height M				5752.63 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 4.587 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 <u>(RTK)</u> FAST STATIC STATIC OTHER																	
First Observation																	
Station Name (M1) 4 0 0 4 0 0				Description SW corner Sec. 15													
Occupation time				PDOP Best				RMS Best									
Number of Measurements 60				PDOP Worst 1.8				RMS Worst 14.5									
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 1/2 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 1710400400

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-15-05

County Reference No. 1710400400

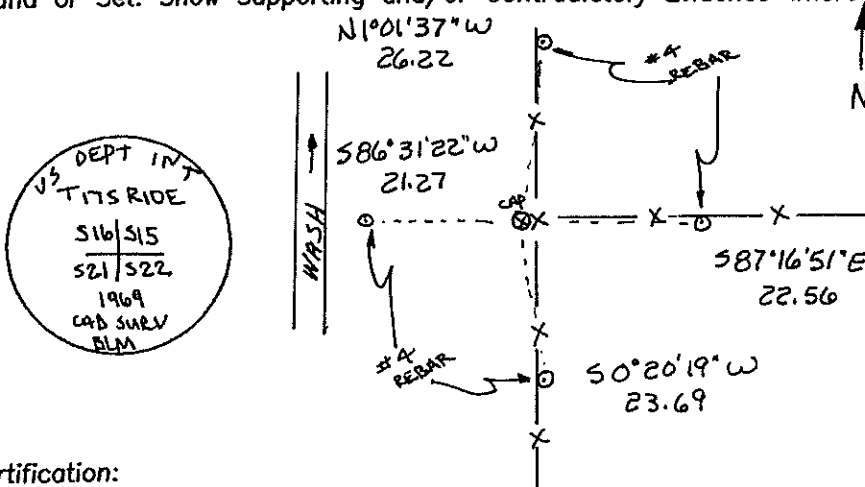
Type of Monument: Section Corner
 Bench Mark

Quarter Corner
 Other _____

Your Description and Observation of Monument Found (Be Specific):
 1969 BLM BRASS CAP 1" 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

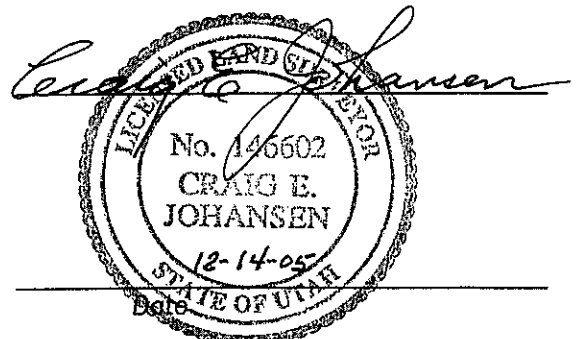
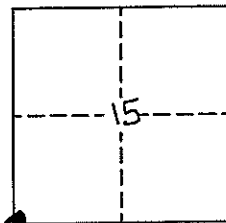
This is to certify that I was in responsible charge of the surveying work described in this record and that to the best of my knowledge the information presented herein is true and correct.

Location Diagram:

Section: 15

Township: 17s

Range: 10E



PLSS GPS Observation Sheet

Project Name SL T17S R10E <small>(Meridian Township Range)</small>		Township T 1 7		1/2 (2)	N S	Range 1 0		1/2 (2)	E W	Section		Meridian SL US		
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/15/05						
Contacts Phone (435) 381-2523														
Control Station														
Name CLV GPS 11		Type COR HARN TRI <input checked="" type="radio"/> Other EMERY COUNTY							Accuracy Order					
USGS Quad Name CLEVELAND UTAH		Datum Nad27 Nad83 <input checked="" type="radio"/> Nad83 (1994) WGS84 Local							State UTAH County EMERY					
Latitude N 3 9 - 2 1 - 3 7 . 1 7 4 2 6 1						Longitude W 1 1 0 - 4 9 - 2 8 . 6 7 6 1 8								
Northing 6 9 3 6 4 6 8 . 5 7						Easting 1 8 3 1 3 7 2 . 4 6								
Units Survey Foot <input checked="" type="radio"/> International Foot Meter		Coordinate Type State Plane <input checked="" type="radio"/> UTM				Zone Utah North <input checked="" type="radio"/> Utah Central Utah South		Vertical Datum NGVD29 <input checked="" type="radio"/> NAVD88		Ellipsoid Height 1735.93 M FT			Geoid Height M 5752.63 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		4.587 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)		4 0 0 5 0 0		Description NW corner Sec. 15										
Occupation time			PDOP Best				RMS Best							
Number of Measurements 60			PDOP Worst 2.4				RMS Worst 10.9							
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 1/2 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 1710400500

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-15-05

County Reference No. 1710400500

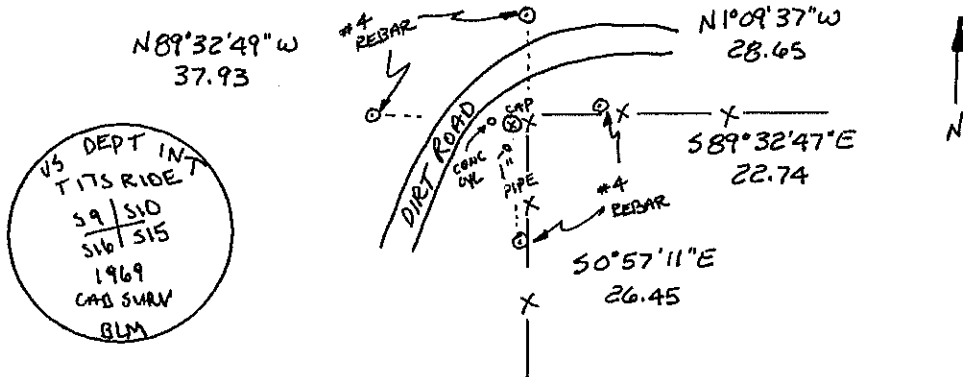
Type of Monument: Section Corner _____ Quarter Corner
 _____ Bench Mark _____ Other _____

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

1969 BLM BRASS CAP 8" ABOVE GROUND LEVEL WITH A 4" DIA. CONCRETE CYLINDER AND A 1" DIA. PIPE MARKED 3A5 ALONGSIDE.

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.



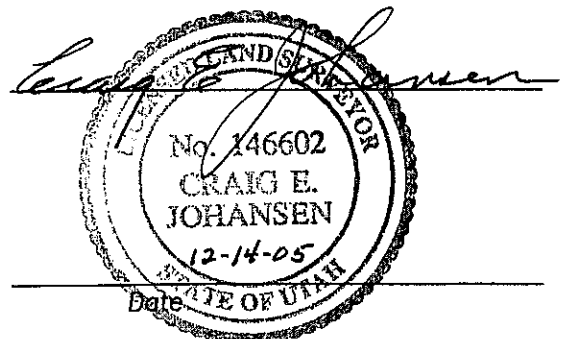
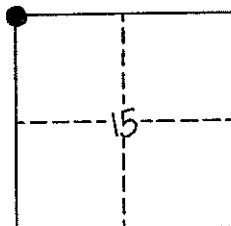
Certification:

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: 15
 Township: 17S
 Range: 10E



PLSS GPS Observation Sheet

Project Name SL T17S R10E (Meridian Township Range)		Township T 1 7		1/2 (2)	N S	Range 1 0		1/2 (2)	E W	Section		Meridian (SL) US																			
Contacts Name Lee M. Swasey		Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/15/05																							
Contacts Phone (435) 381-2523																															
Control Station																															
Name CLV GPS 11		Type COR HARN TRI <input checked="" type="radio"/> Other EMERY COUNTY						Accuracy Order																							
USGS Quad Name CLEVELAND UTAH		Datum Nad27 Nad83 <input checked="" type="radio"/> Nad83 (1994) WGS84 Local						State UTAH County EMERY																							
Latitude						Longitude																									
N	3	9	-	2	1	-	3	7	.	1	7	4	2	6	1	W	1	1	0	-	4	9	-	2	8	.	6	7	6	1	8
Northing						Easting																									
6	9	3	6	4	6	8	.	5	7							1	8	3	1	3	7	2	.	4	6						
Units Survey Foot <input type="radio"/> International Foot <input checked="" type="radio"/> Meter			Coordinate Type <input type="radio"/> 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 1735.93 M			Geoid Height 5752.63 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 4.587 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)		4 0 0 4 4 0		Description W 1/4 corner Sec. 15																											
Occupation time		PDOP Best						RMS Best																							
Number of Measurements 60		PDOP Worst 3.4						RMS Worst 13.2																							
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 1/2 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 1710400440

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-15-05

County Reference No. 171040044D

Type of Monument: Section Corner
 Bench Mark

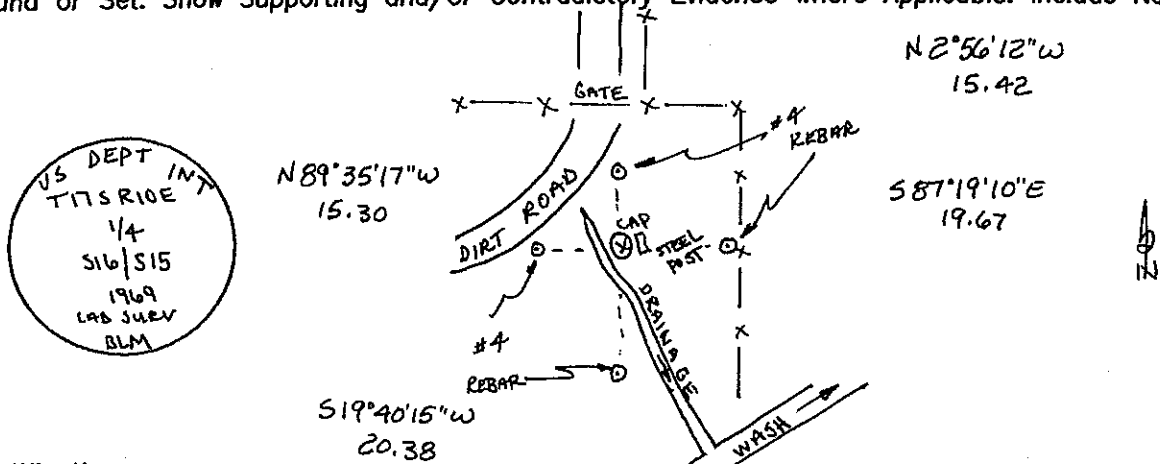
Quarter Corner
 Other _____

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

1969 BLM BRASS CAP 8" ABOVE GROUND LEVEL WITH A STEEL FENCE POST LYING ALONGSIDE.

Description of Monument, Reference Monument or Accessories Established by You to Perpetuate the Location of this Point: SET 4 #4 REBAR AS SHOWN BELOW
 RE-SET STEEL FENCE POST ALONGSIDE

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:

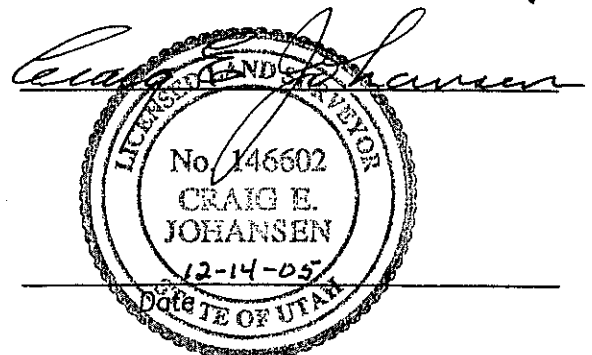
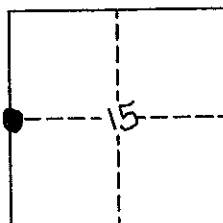
Firm name and/or Surveyor: Johansen & Tuttle Eng.

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: 15
 Township: 17S
 Range: 10E



PLSS GPS Observation Sheet

Project Name SL T17S R10E (Meridian Township Range)				Township		1/2 (2)	N S	Range		1/2 (2)	E W	Section		Meridian																			
				T	1	7		S	1	0		E			(SL) US																		
Contacts Name Lee M. Swasey				Source Agency JOHANSEN & TUTTLE ENGINEERING						Date 11/15/05																							
Contacts Phone (435) 381-2523																																	
Control Station																																	
Name CLV GPS 11				Type COR HARN TRI <input checked="" type="checkbox"/> Other EMERY COUNTY						Accuracy Order																							
USGS Quad Name CLEVELAND UTAH				Datum Nad27 Nad83 <input checked="" type="checkbox"/> Nad83 (1994) WGS84 Local						State UTAH County EMERY																							
Latitude								Longitude																									
N	3	9	-	2	1	-	3	7	.	1	7	4	2	6	1	W	1	1	0	-	4	9	-	2	8	.	6	7	6	1	8		
Northing								Easting																									
6	9	3	6	4	6	8	.	5	7							1	8	3	1	3	7	2	.	4	6								
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 1735.93 M				Geoid Height 5752.63 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 4.587 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)				4				2				0				5				0				0				Description W 1/16 corner Sec. 10 / Sec. 15					
Occupation time				PDOP Best				RMS Best																									
Number of Measurements 60				PDOP Worst 1.5				RMS Worst 12.6																									
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 1/2 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 1710420500

EMERY COUNTY LAND SURVEY MONUMENT RECORD

Date of field work: 11-15-05

County Reference No. 1710420500

Type of Monument: Section Corner
 Bench Mark

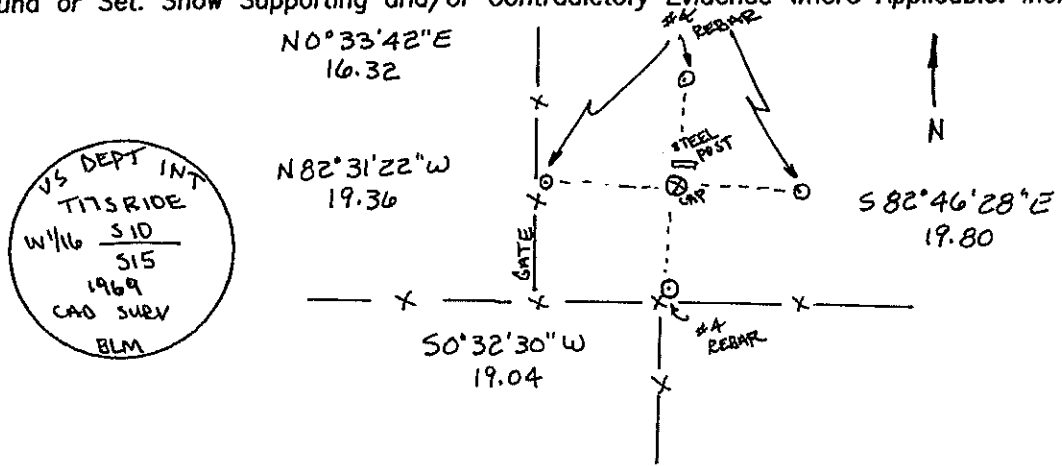
Quarter Corner
 Other 1/16 CORNER

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

1969 BLM BRASS CAP 6" ABOVE GROUND LEVEL WITH A STEEL FENCE POST DRIVEN ALONGS

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: .15
 Township: 17S
 Range: 10E

